THE ARCHITECTURAL FORUM

FOR QUARTER CENTURY THE BRICKBUILDER

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THREE COUNTRY HOUSES
By John Russell Pope
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ASPECTS OF INDUSTRIAL HOUSING
Industrial Town Planning from work of John Nolen
Review of Government Activities
Relating to Solution of Present Problems

THE DEVELOPMENT OF AMERICAN ARCHITECTURE
A brief and connected history by Fiske Kimball

A GOTHIC DETAIL DRAWING
From the office of Cram, Goodhue & Ferguson

JANUARY 1918

PUBLISHED *by* ROGERS AND MANSON COMPANY
BOSTON AND NEW YORK AND DEVOTED TO THE
ART SCIENCE AND BUSINESS OF BUILDING

THE ARCHITECTURAL FORUM

VOLUME XXVIII NUMBER 1

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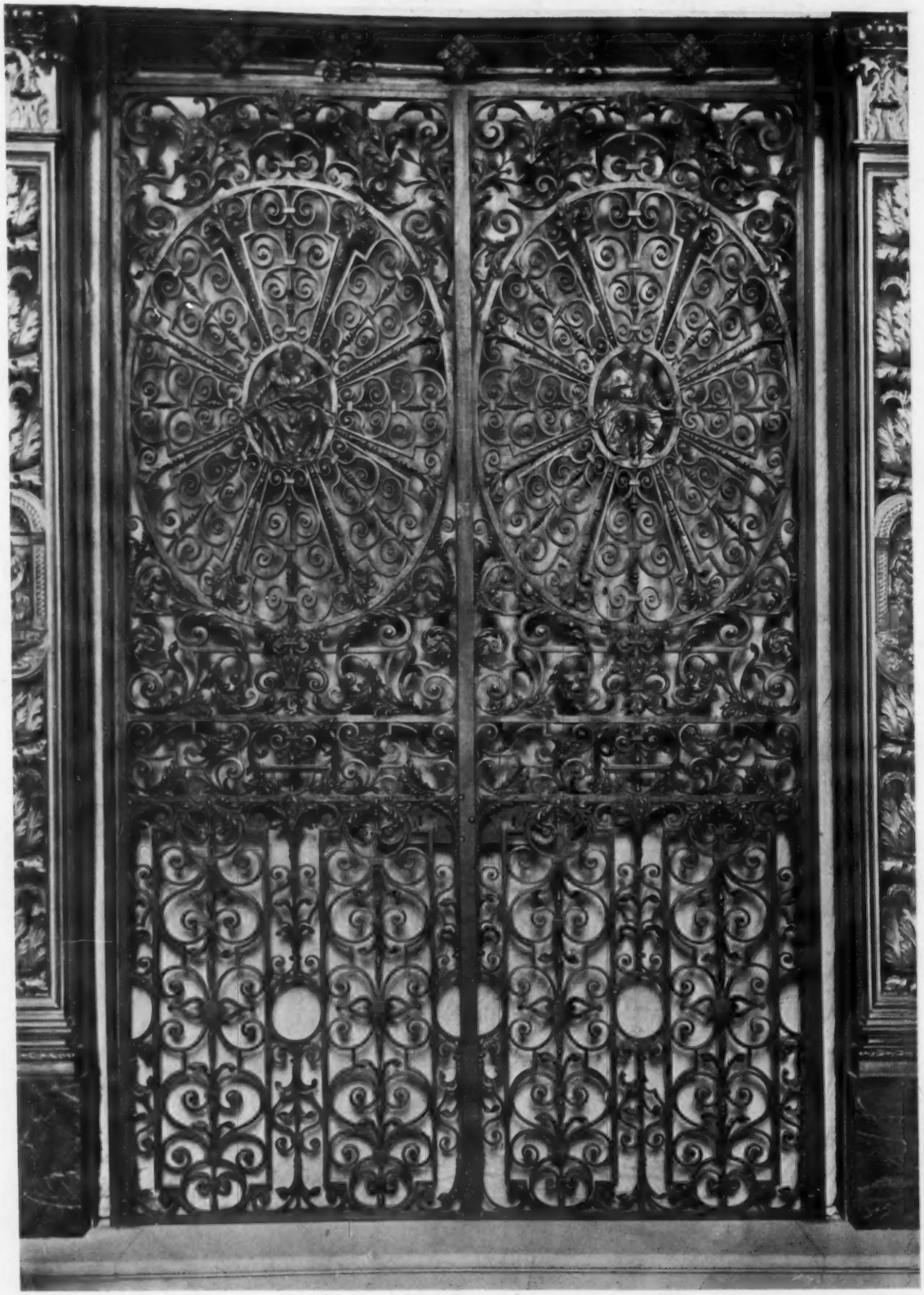
PLATE ILLUSTRATIONS

LETTERPRESS

Published Monthly by
ROGERS AND MANSON COMPANY
85 Water Street, Boston, Mass.
Advertising Department, 42 West 39th Street, New York

Yearly Subscription, payable in advance, U.S.A., Insular Possessions and Cuba $5.00
Canada $5.50 Foreign Countries in the Postal Union 6.00
Single Copies 50 cents All Copies Mailed Flat

Trade Supplied by American News Company and its Branches. Entered as Second Class Matter, March 12, 1892, at the Post Office at Boston, Mass.



CENTER GATES OF SCREEN IN SOUTH CHOIR AISLE, ST. PAUL'S CATHEDRAL, LONDON, ENGLAND

WROUGHT IN IRON BY JEAN TIJOU

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THE ARCHITECTURAL FORUM
FOR QUARTER CENTURY THE BRICKBUILDER

VOLUME XXVIII JANUARY 1918 NUMBER 1

The Development of American Architecture

By FISKE KIMBALL

Editor's Note. — No attempt has hitherto been made to trace in connected fashion the development of American architecture from its origin to the present day. In the following sketch the author of several special studies in the history of American architecture attempts the task, with the employment of rich material relating to many beautiful and important buildings which have been hitherto neglected.

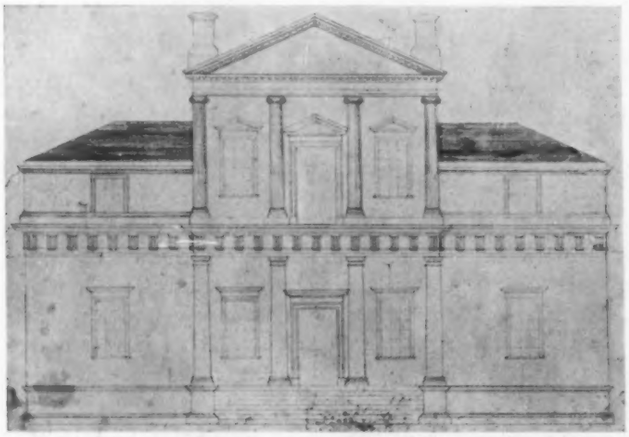
I. THE COLONIAL PERIOD

WITH the coming of the European colonists to the New World a problem new and unique in modern times was created for architecture; civilized men had to face conditions which were absolutely primitive, and had to struggle against odds for the attainment of traditional ideals of building. As a result there was everywhere a pioneer stage in which the settlers seized the first means at hand — *adobe*, logs, or even turf — and built as simply as would serve primary needs of shelter and worship. Later they sought to replace such modes of building by those of their mother country, but these were inevitably modified to a greater or less degree by differences in the materials available, and in economic and social conditions. The duration of the pioneer period itself varied greatly with the character and support of the colonists, and with the resources and climate of the region.

The English colonies in America were at first widely separated, as well as very different in their character and purposes, so that there was much diversity of architecture even in those where the settlers were mainly of English birth. Certain general characteristics hold for all, however, among them the essentially medieval nature of all the buildings of the seventeenth century. This could scarcely have been otherwise, in view of the fundamental medievalism of most buildings in England during the century, outside of London and of court circles. England has been the last country to adopt Renaissance forms of detail, and was much later still in adopting classical types of plan and mass. Throughout the seventeenth century the country churches built in England were Gothic, and the rural cottages and minor country seats were medieval in all but a few applied details and their tendency to symmetry. Even in London, we may recall, the first classical church was not built until 1630, and it had no imitators until after 1666. Small wonder, then, if the colonists, themselves largely from the rural districts, erected buildings which, stripped of almost every detail not structurally indispensable, revealed their basic medievalism. A corollary of this, and of the relatively primitive state of society, was the general absence of professional architects and the dependence of the craftsman builders on tradition in matters of style and workmanship. Another general trait in the seventeenth century was the almost universal prevalence of wood as a building material, even in regions where the later monuments which are preserved are of masonry. In contrast with England the new continent was densely forested, so that in clearing land for cultivation timber was felled ready to hand. The immediate introduction of saw mills in populous centers made plank still less expensive than otherwise, so that for years, and even to this day, brick and stone have stood at a disadvantage in cost far greater than anywhere in Europe.

Virginia had at the start the backing of a powerful trading company, and the advantage of a unique staple crop in tobacco, which soon became enormously valuable for export. With the outbreak of the Civil War in England, the colony, with Maryland, became a refuge for the royalists, many of them possessing some means. Nevertheless architectural progress was very slow. From the founding of Jamestown, in 1607, the home authorities made constant efforts to establish towns and to require that buildings be constructed of brick. The absolute necessity of a plantation system, however, forced the inhabitants to scatter along the navigable rivers and made mechanics of any kind scarce. Framed houses only began about 1620, and were still uncommon in 1632. Clay and some brickmakers there were, yet the first house wholly of brick does not seem to have been built until 1638. The typical Virginia house of the seventeenth century was a rectangular framed building of very moderate size, devoid of any architectural ornaments, and with a great chimney of brick at each end. The buttress-like form of these chimneys, with the steepness of the roof, proclaimed the medieval basis of the design.

St. Luke's, Smithfield, Va.
Mid-seventeenth century church, showing transplantation of late Gothic traditions to America



From Kimball: "Thomas Jefferson, Architect"

The Original Design of Monticello, 1771, Thomas Jefferson, Architect
The first strictly Palladian house designed in America

In New England, buildings entirely of brick and stone were especially rare; on the other hand, permanent framed buildings of wood were erected almost immediately after the founding of Plymouth (1620), Boston (1630), and Hartford (1636), with no long period of makeshifts. The earliest settlers included carpenters, and, under the conditions of town life which prevailed, artisans were numerous throughout the Colonial period. They brought with them the medieval English traditions of framing houses with overhanging upper stories, and of filling up the frame, where possible, with brick. The changeable climate did not favor the exposure of such half-timber work to the weather, and from the start, in most instances at least, the exteriors were covered with clapboards. The windows were small leaded casements, essentially medieval, like the clustered form of chimneys and the ornamental drops at the corners of the overhangs. Several different types of plan may be distinguished, each characteristic of certain localities. In Massachusetts Bay and the Connecticut colonies the usual type was one having two rooms upstairs and down, with an entry and a great chimney between, and often with a lean-to added at the back. Later the lean-to was included from the start, as in the Whipple house at Ipswich, Mass., well preserved and restored. The typical house in Providence Plantation was one of a single room below, with a great chimney at one end, creating the "stone-end house." Occasionally, as in the Theophilus Eaton house at Hartford, Conn., the Elizabethan U or H plan, with a central "hall," was preserved. In interiors the cavernous fireplaces, the wainscot sheathing, and the occasional paneling were de-

This is even more pronounced in the oldest of the Virginia churches still remaining, St. Luke's, Smithfield, which includes some bricks of 1631, although it is very doubtful if the whole fabric was built so early. With its pointed and mullioned windows this is unmistakably an English parish church of the outgoing Gothic, in spite of the quoins of its tower. In Maryland and Carolina the same general history was later repeated, bricks of local manufacture being gradually adopted by the wealthier planters. Although Carolina was not settled until after 1660, and large houses were not built until near 1700, one or two of them still show the fantastic curved gables of the Jacobean manors.

"Westover, Virginia," about 1730
Vernacular brickwork with isolated classical and baroque details

void of any Renaissance detail. Toward 1700 the framed overhang was abandoned, but medieval details and methods lingered well into the eighteenth century.

The churches or "meeting houses" in New England likewise retained survivals of medieval forms, but their disposition was fundamentally affected by the extreme Protestantism of the settlers there. After the passing of the earliest simple cabins, they tended to conform to the prevailing Protestant type of England and the Continent, — a squarish, hall-like room, with galleries around three sides and the pulpit against the fourth, which was generally one of the longer sides. There was no tower; the belfry was merely placed astride the ridge at one end, or on a deck in the center when the roof was hipped, as in the "Old Ship" Meeting House at Hingham, Mass.

Philadelphia was not founded until 1682, so that colonial architecture in Pennsylvania has mostly the post-Renaissance detail of the eighteenth century. Before leaving the medieval survivals, however, one must consider the buildings of the German sects of Pennsylvania, although the earliest of any pretensions were not built until well after 1700, and others not until about 1750. The monastic halls of religious communities like that at Ephrata, with their whitewashed walls and small windows, their steep roofs and ranges of little dormers, are unmistakable offshoots of the Middle Ages in Germany.

With the eighteenth century came greater means and comfort, wider use of permanent materials, and the adoption of classical forms of detail. The whole seaboard was now under English rule, and local diversity was subject to uniform English influence. By this time in England the style of Jones and Wren was everywhere established, and the small provincial towns abounded with doorways and interior woodwork in which the favorite post-Renaissance motives of broken pediments, consoles, and rich carving were conspicuous. Still more important for the colonies was the codification of current architecture in books, great and small, which reproduced both formulæ for the orders and other details, and designs for whole buildings. These were imported very freely and will be found to have had the greatest influence on single buildings and on the prevailing style. In the early part of the

Courtesy of the White Pine Bureau

The Whipple House, Ipswich, Mass.

Mid-seventeenth century house, showing medieval survivals

The Redwood Library, Newport, R. I., 1748–50, Peter Harrison, Architect

The first public building in the colonies to have the free-standing portico of grammatical academic forms. The rear portions are modern additions

Drawing Room, Miles Brewton House, Charleston, S. C., about 1765

Extreme elaboration of individual features with many baroque survivals

century the colonists merely adopted classical details for the individual features of their buildings — the cornice, the doorway, or perhaps a cupola — without any general classical treatment beyond a symmetrical arrangement. Later the churches and public buildings, and finally even the dwellings, began to assume a monumental character. During the later years of the colonial régime there also appeared some tendency toward the Palladian strictness which had carried the day in England, and had dominated the later architectural publications. In these movements, as was also the case in England, cultivated amateurs played the leading rôle, although the builders themselves were quick to master the teaching of the books and to assume also the functions of architects.

The first signs of the transition at the opening of the eighteenth century were the adoption of less steep roofs, the substitution of sash windows for the leaded casements, and the tendency to employ a uniform cornice with a hip roof, or a pedimented gable, instead of a gable of medieval type. When cornice and door were given rich detail — of modillions and of pilasters with a pediment — one had the scheme exemplified about 1730 in Westover, Va., and in the finest houses of that day throughout the colonies. The ample and symmetrical dependencies seen at Westover were characteristic of Virginia and of Maryland, and were sometimes seen at Philadelphia.

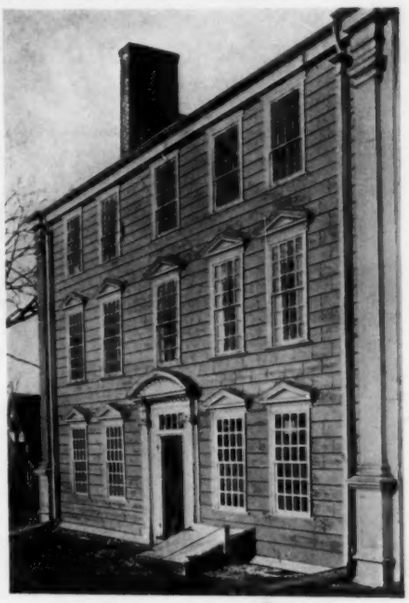
St. Paul's Chapel, New York, 1764–66, McBean, Architect
One of the rare instances of the great free-standing portico in colonial times. The steeple was added in 1794 by John McComb

Frequent use of the curved and the broken pediment and of rusticated enframements revealed that the baroque element of Wren's work was still current. In a few instances, beginning about 1735, tall pilasters were applied to the corners of the house. As these were only associated with an individual pedestal and a fragment of entablature, however, they create no general architectonic treatment. The earliest important house in which a more academic scheme was attempted was Mount Airy in Virginia (1758), where two loggias — one arched, the other colonnaded — were the axial features of a group with balanced outbuildings, taken apparently from James Gibbs' published designs. It was not until 1760 or later that the free-standing portico with a pediment was applied to dwellings, and this did not become at all common until after the Revolution. In a few instances, notably the Miles Brewton house in Charleston, S. C. (*c.* 1765), there were superposed porticoes following the general scheme of many of Palladio's villa designs, although with much freedom in proportions and detail. Strict following of Palladian canons in residence work only began with Thomas Jefferson's design for Monticello in 1771, on the very eve of the Revolution. The interiors of the houses, owing partly to the prevalence of wooden paneling, were much richer and often more coherent in architectural treatment than the exteriors. The subdivision of walls by pilasters was by no means uncommon, although more often, as in the Brewton house, each essential element, such as a doorway or chimney-piece, was elaborated individually. Baroque features persisted even after they had vanished from the exterior.

The buildings in which the more advanced tendencies were first manifested were the churches. Old St. Philip's, Charleston, consecrated 1723, had a portico of four columns, freely grouped, only a few years after the great London churches with a similar general *parti*. The nave of Christ Church, Philadelphia, built 1731–44, under the direction of Dr. John Kearsley, has an architectonic treatment of the Roman arch order with pilasters in two stories. Both of these buildings had the basilican interior treatment of St. Brides' and other London churches, which became the favorite system for the more elaborate colonial examples. The exterior portico, which in St. Philip's had only the width of the tower, was enlarged in St. Michael's, Charleston (1752–61), and in St. Paul's Chapel, New York (1764–66), to embrace almost the full width of the church. The steeples followed English examples, among which that of St. Martin-in-the-Fields and other designs reproduced in Gibbs' published works attracted the most imitators.

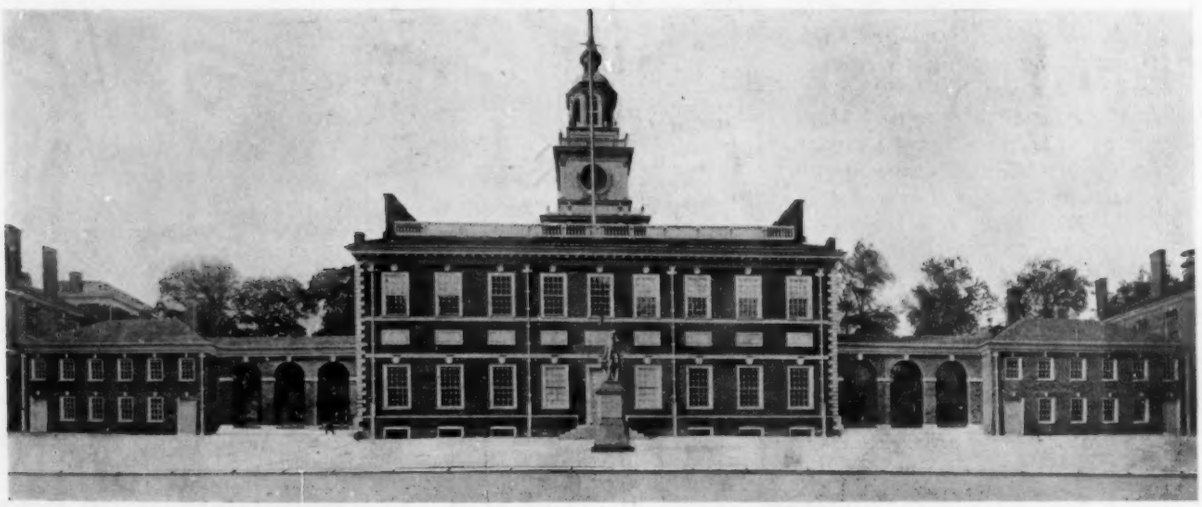
The earliest public buildings of any preten-

sions, such as the old New York City Hall (*c.* 1700) and the old Virginia Capitol at Williamsburg (1702–14), still betrayed a lingering medievalism in their H plans, in spite of the round arches or the columns of the connecting loggias. Even in buildings where all medieval character has vanished, like the old State House (Independence Hall) in Philadelphia (1732–35), the architectural character remains fundamentally domestic, and the public functions are suggested on the exterior only by the greater size of the building and its possession of a cupola. In the interior of Independence Hall, indeed, there is a monumental treatment by an arch order with engaged columns, which was unique in the colonial period. The first attempt at academic design was Faneuil Hall in Boston (1742), by the painter Smibert, with the arch order in two stories, the lower one forming an open market.



Royall House, Medford, Mass., 1737
Early appearance of the colossal pilaster, though still as an isolated detail

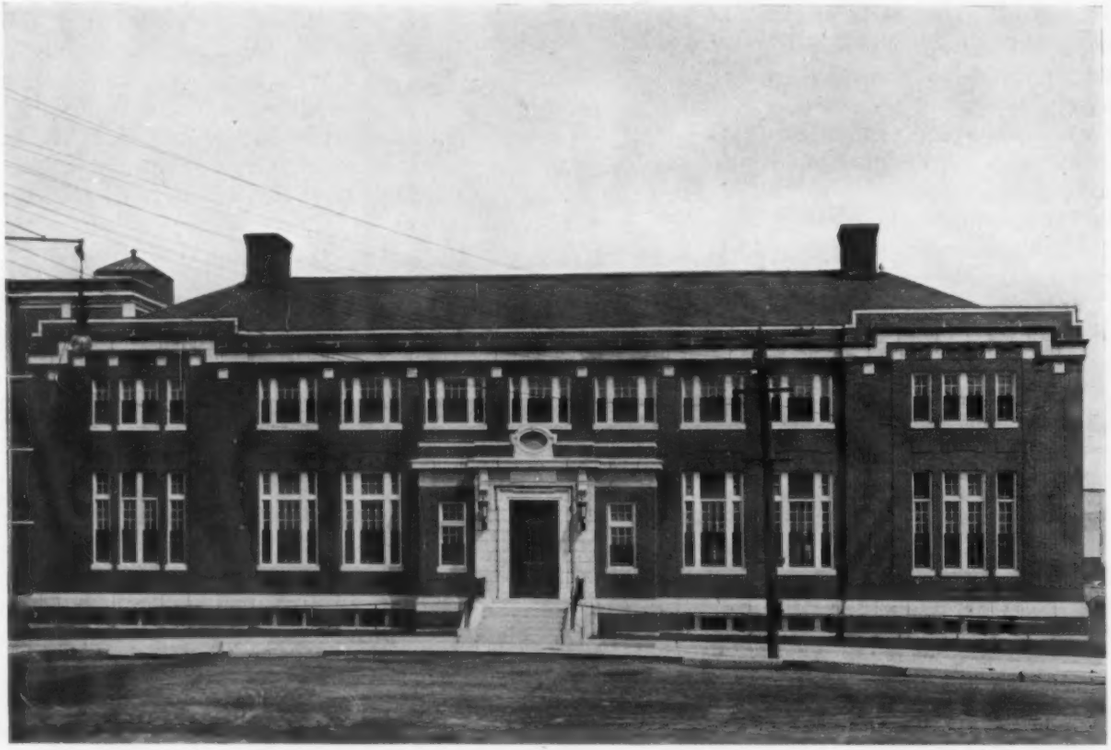
A series of buildings of unique architectonic character was designed by Peter Harrison of Newport, R. I., who, whether or not he had professional training in England, deserves the distinction of being the first professional architect in North America. The Redwood Library in Newport (1748–50) has a Roman Doric portico of four columns, united to the body of the building by a single unbroken entablature. Originally only the small wings flanking the façade prevented the building from conforming entirely to the temple type, already imitated in the garden temples in England. The Market at Newport (1761) represents a more advanced academic phase than Faneuil Hall, in that it involves an engaged order running through two stories, over an arched basement. This was the characteristic motive of the more ambitious buildings on the eve of the Revolution, such as the Pennsylvania Hospital, the Exchange in Charleston, and others. The greater number even of public buildings, however, still retained not only the modest materials, brick and wood, but also the simple wall surfaces and isolated details commonly used during the early part of the century.



Old State House, "Independence Hall," Philadelphia, Pa., 1732–52, Andrew Hamilton, Architect
Restored 1898 to its condition in 1776. A typical public building of the colonies, straightforward brickwork and classical details without any general academic treatment

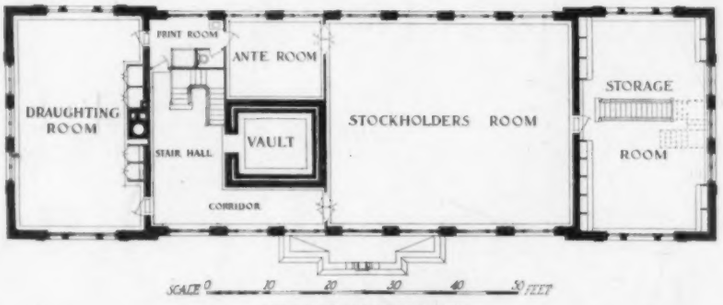
Office Building for Naumkeag Steam Cotton Company, Salem, Mass.

KILHAM & HOPKINS, ARCHITECTS

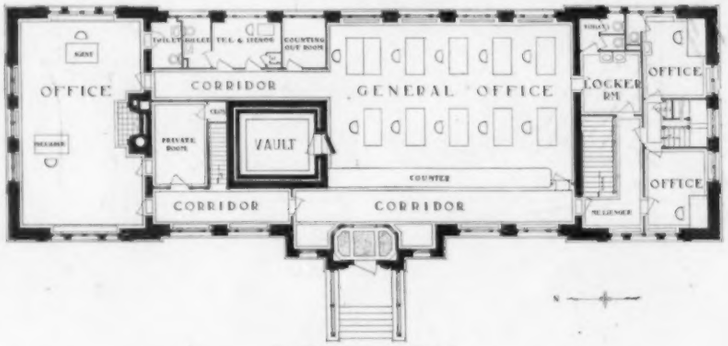


THE exterior of this building is constructed of a smooth red brick to match that used in the curtain walls of the new mill plant which is of reinforced concrete with brick panels. The trimmings of the office building, including the cornice, are of granite, and the roof is covered with slate. The construction is practically fireproof. The interior is finished in fumed quartered oak and contains the mill offices, agent's office, drafting room, and room for stockholders' meetings. A well equipped garage is provided in the basement.

A feature in the arrangement of the plan is the provision for the employees coming for their pay, whereby they enter the basement from which they can easily reach the pay counter on the floor above, thus keeping the main office portion of the building free for the transaction of regular business, and incidentally in a more cleanly condition.



SECOND FLOOR PLAN



FIRST FLOOR PLAN

Some Aspects of Industrial Housing

I. INTRODUCTORY AND EXAMPLES OF INDUSTRIAL TOWN PLANNING FROM THE WORK OF JOHN NOLEN

By CHARLES C. MAY

THE broad subject of housing, as a problem, includes the provision of adequate living facilities in all cases where laws of supply and demand have failed to meet modern requirements. The terms used are necessarily inexact, for standards of living do not lend themselves to precision in statement. Yet the idea includes, in a general way, both of the principal divisions of the subject: first, the improvement of existing conditions where housing is bad because of congestion — overcrowding the acre, as in parts of most cities, and overcrowding the room, as in a few spots, at least, in nearly every town; and, second, the provision of new housing facilities to meet new or increased demands. The former has been and probably will always be a matter of legislation and inspection; the latter is a constructive task which is inspiring in its combination of responsibility with opportunity.

Roughly speaking, the recognition of the housing problem, in its first sense, dates in our own country from about the middle of the nineteenth century. At that time not a single city in the United States possessed a building code to regulate the construction either of single family dwellings or of tenements. The legislative lead was taken by New York in the enaction of its tenement house law of 1867. As was natural, the bent thus imparted to efforts toward housing reform has proven dominant through forty or fifty years. As city after city has awakened to the existence of its own housing problem, attention has been focused very largely upon tenement conditions; legislation has been aimed at remedying and restricting the tenement slum. Only to a far lesser degree has study been given to the social and economic conditions which have produced the tenement and the slum; and only within a comparatively short period have laws been passed which aim specifically to prevent the growth of new slums like the old ones. Today, too, the emphasis is placed far less exclusively upon the tenement as the seat of housing evils, for we know now that conditions which encourage epidemics and tuberculosis, that constitute fire hazard, that foster immorality and breed defectives, are by no means confined to the tenement. Overcrowding the room is an evil far more widespread than overcrowding the acre, yet equally ominous.

In these articles we are to be more particularly interested in the housing problem in its second sense — that of providing new housing to meet new demands, and, more particularly still, demands produced by industrial expansion rather than those ordinarily met by the usual real-estate development.

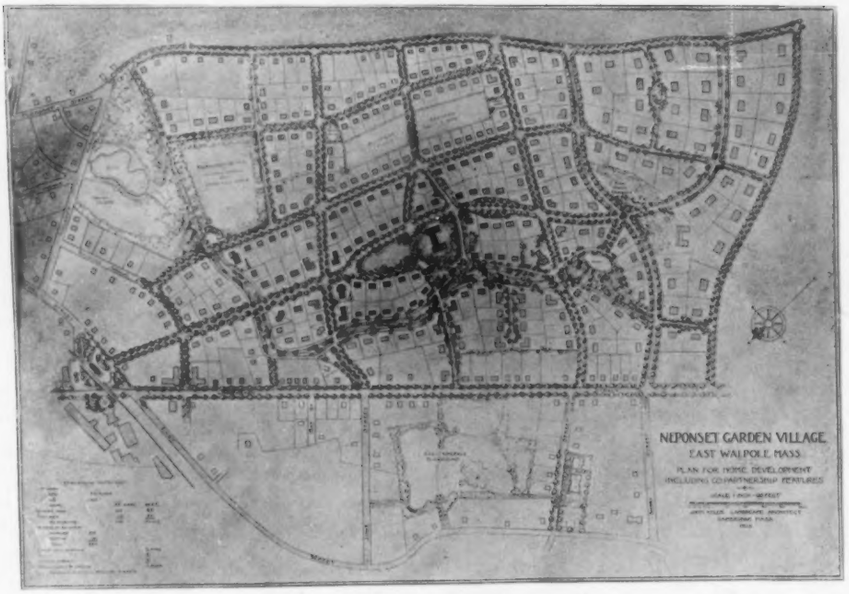
Beginnings in this sort of housing problem far antedate those in the first class already mentioned. The U. S. Bureau of Labor Statistics, in recent investigations, found evidences of the "company house" back into the eighteenth century. Lowell, 1798, and Wilmington, 1831, are among the earliest examples. They were the forerunners of a large group where villages sprang up, oftentimes around a single industry upon which they depended not only for their growth and prosperity, but for their very existence. One thinks at once of such towns as Hopedale and Whitinsville, Mass., and, in their early days, of Pullman and Gary, near Chicago, as examples of this inseparable relation between industry and town.

Because this relation has been so close, the subject of industrial housing is intimately bound up with the several great movements that have marked industrial progress during the last half century or so, with all the changes they have wrought. First came the movement toward consolidation, in which big business replaced small businesses. The mountain stream that formerly furnished power to a series of small, independent paper mills now runs idle and unhindered; the mills have been "absorbed," the operatives scattered, or rather concentrated, many of them seeking a livelihood in the great mill of the city — the mill which has swallowed up their former means of employment. Everywhere and in every line of business the same process has taken place in the wave of centralization. Small towns have become booming cities; an entire new group of industrial and commercial centers, each one a good sized metropolis, has arisen from the smaller towns that were wont to think they had perhaps reached their limit of expansion.

We are all familiar with this vast change which within a few decades has diminished our rural population and multiplied our urban many times. Congestion of factories has ever been productive of congestion in the tenement district not far away. Thus the vast expansion of industry with its concentration of population, its increasing employment of low waged employees, its gravitation toward traffic, supply and power centers, has proven a very potent factor in the exaggeration of the housing problem in both its aspects.

But there has ensued a secondary reaction in large-scale industrial growth. City conditions have not proven permanently advantageous to the largest industrial plants. The case is not unlike that of an-

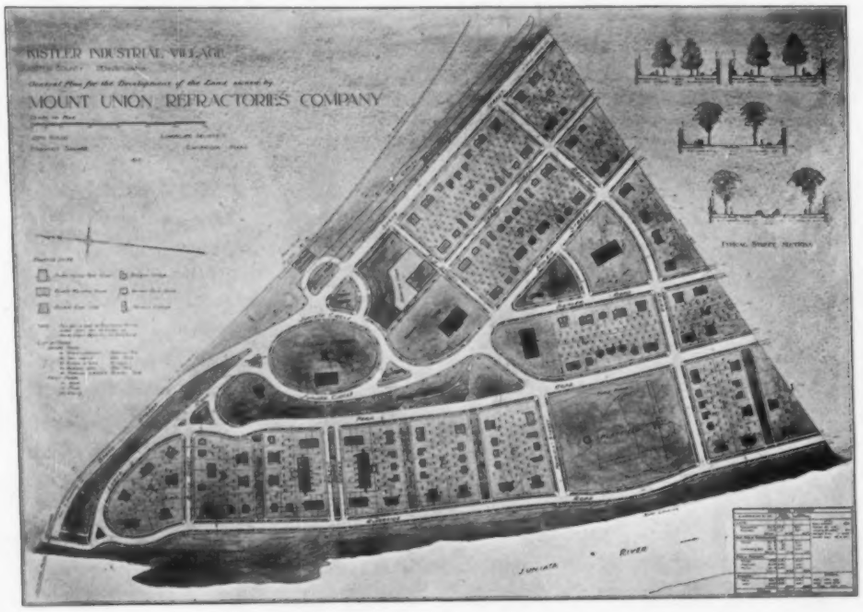
other American phenomenon, the skyscraper. So long as it was an individual exception —a Singer Building or a Woolworth tower—its promoters reaped large rewards and enjoyed singular advantages of light, air, and exposure beyond their neighbors of the more ordinary type. But when gradually the movement spread over whole districts, and when the multi-storied structure was expressed not as a tower, covering only a small proportion of the lot, but as a gigantic box over all the area the law would allow, then it became evident that such development was inadvisable, uneconomic, and disastrous. So in the urbanization of industries, those first on the spot reaped probably all the anticipated benefits, and did so about in proportion as they were located nearest the very center of things. Presently, however, came need for expansion, and the cramping restriction of the city street system made itself felt; new land must be acquired, and the greatly enhanced cost of real estate became a serious deterrent; at the same time carrying charges on the original plant had jumped to points only partly justified by the newly exalted value in the site itself.



Plan of Neponset Garden Village, East Walpole, Mass.
John Nolen, Landscape Architect

Hence arose that industrial countermarch of which Mr. Graham R. Taylor treats in his book, "Satellite Cities." One after another manufacturers of all classes have found it to their advantage to remove bodily from their central, urban situations into districts less congested, less expensive, and more flexible. Begun with individual instances as much as twenty years ago, the movement of industry toward the outskirts of the city is to-day a general one of national importance.

That this vast, industrial flux and reflux has a bearing upon the subject of housing, is obvious; yet the immediate reaction has not been such as might have been predicted. Decentralization of industries has given little or no relief from congestion in the tenements of the greater cities, nor from the need for a larger supply of inexpensive houses in the smaller ones. What it *has* produced in certain cases is a new population of wage-earners who must add a transportation cost to their expense budget, since in most cases the new factory facilities have been accompanied by no corresponding facilities for houses. We find, therefore, instances of the condition pointed out by Mr. Taylor—large industrial areas in the suburbs, and adjacent to them, not acres of



Plan of Kistler Industrial Village, Mifflin County, Pa.
John Nolen, Landscape Architect

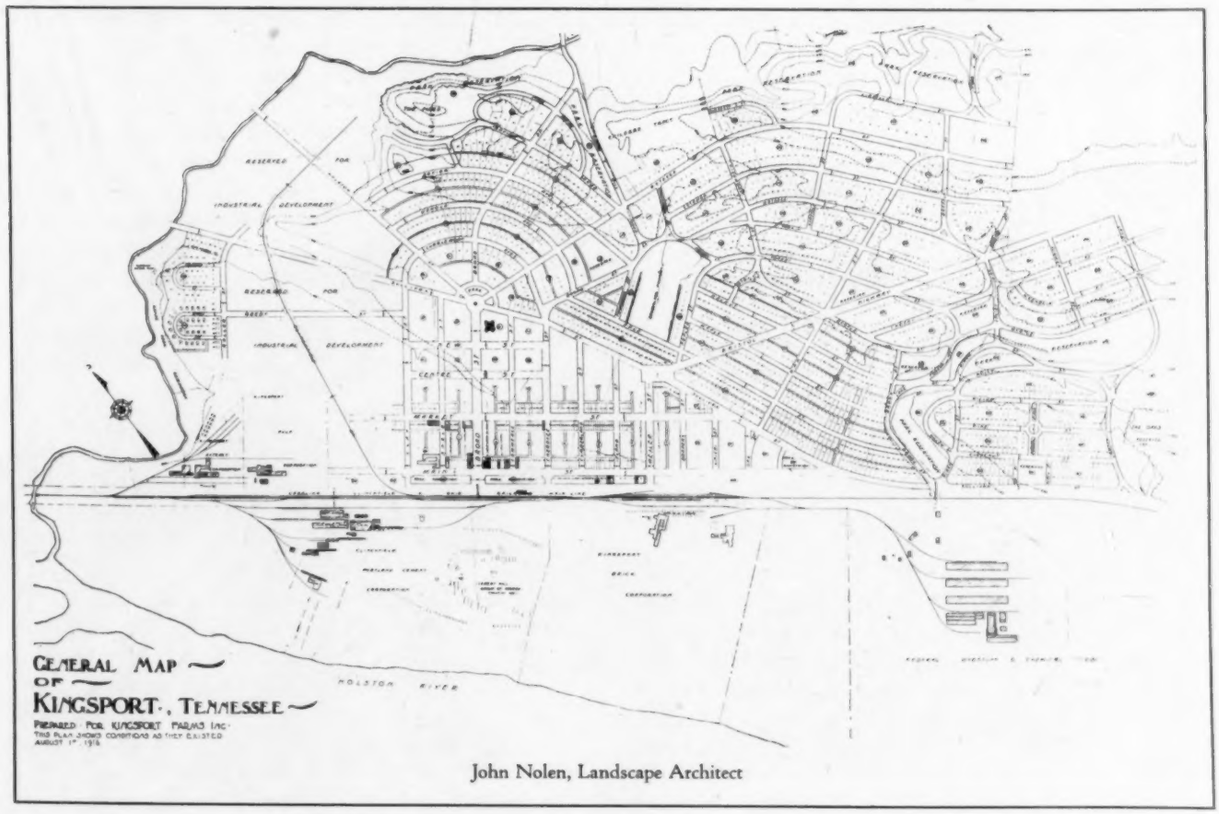
yond the semi-civilization of the outskirts, to points ... past regarded these settlements as temporary, their

well planned, cheap houses for the factory population, but houses for middle-class commuters whose work is in the city. The factory employees, on the other hand, continue to live in the tenement at the heart of the city's congestion. Night and morning the two classes exchange places — country for city and *vice versa*.

Such conditions bring out very clearly one of the difficult questions in the subject of industrial housing, — that of making some one really responsible for housing the worker. The employer has not recognized the responsibility as his, because he has heretofore been more or less successful in his reliance upon a local or adjacent labor market to keep his payroll filled; the speculative builder has avoided it, because he has found richer returns in catering to the middle-class commuter; the governing body (federal, state, or municipal) has not accepted it, because America has, up to the present, feared such extension of the governmental function. The case has simply been allowed to go by default; as usual, everybody's business has proven nobody's business.

Of late years, however, an increasing number of employers of labor, some among the comparatively small, many among the very largest, have taken this burden upon themselves. They have verified the conclusions reached by those best qualified to speak: first, that the influence of environment upon the individual worker is a vital element in his efficiency, and in the aggregate becomes a factor of considerable weight in the balance between success and failure; second, that certainly for higher grades of workmen, and under certain conditions of employment, for the lower paid employee as well, individual ownership of houses is desirable, not only for its very considerable saving to employers through steadying men in their jobs, but also for its healthy influence toward thrift, self-respect, and reliability upon the men themselves; third, that the failure of private initiative to provide industrial housing adequate in either quantity or quality must be accepted as a definite conclusion, and that big business would do well therefore to include in its initial program of capital outlay a charge for housing its man-power, on much the same basis as that for housing its plant and equipment; fourth, that since the manufacturer's primary job is turning out goods, not putting up and getting rid of houses, the employer must not look for profits on his housing program comparable to those of the speculative builder. His own returns must be and can be anticipated in other directions — directly, through stabilizing his forces and eliminating the exorbitant waste of "hiring and firing"; and indirectly over a long period, through increased efficiency, health, and morale of the workers.

Prompted by such considerations, numerous employers of labor have taken the most radical step. They have removed beyond the city congestion, be-



John Nolen, Landscape Architect

yond the semi-civilization of the outskirts, to points where with plenty of room for expansion, unhampered by external circumstances, they might work out a salvation under conditions of their own making. The responsibility they have assumed in so doing is no light one. In uprooting and transplanting a unit of population, be it large or small, the operator shoulders the moral obligation to provide not merely the physical requirements of bodily shelter and a means of obtaining food, but also some at least of the manifold social activities of a self-contained community.

One might maintain that this problem is not different from that which has for many years confronted the mining companies in starting a new operation. The nature of the business usually locates the plant apart from conditions of settled town life — oftentimes in most inaccessible and uncompromising surroundings. Whatever settlement is to exist, must of necessity be provided and maintained by the company itself. On the other hand, coal and iron mines are not inexhaustible, nor are their plants readily transformed into other lines of industry. With few exceptions, therefore, the companies have in the past regarded these settlements as temporary, their housing investments as short termed, and any but the cheapest construction unwarranted. These conditions have constituted the mining towns as special cases, and have tended to lower their housing standards, so that while their problem has, in fact, been similar to this newer one, the distinction comes in the spirit in which the problem has been attacked. It might not be unjust to suggest that whereas in the older types of mining camp the policy too often appeared to provide as little and as cheap housing as the company could "get away with," the newer idea says distinctly that the employer is justified in providing all that can be paid for without involving an economic fallacy.

In times less abnormal than the present, it might have been conceivable that the growth of this newer conception of the relation of housing to industry could work out a solution in the natural course of events. The process would have developed through generations of growth, setback, and modification. Actually, war conditions have placed the whole problem in a totally different light. What was formerly regarded by many employers as welfare work, to be entered upon or not, as a matter of debatable policy, has suddenly loomed up as the stiffest requirement in their emergency program. The facts are becoming too well known to require more than the briefest mention. We know, for instance, that within the next few months the New Jersey meadows along Newark Bay will become the seat of a tremendous shipbuilding industry — where its 15,000 workers are to live, nobody knows. We know, too, that Bridgeport is building another munition plant, toward which the federal government has contributed two and one-half million dollars. Several thousand workmen will be required to man that plant, yet not a single home has Bridgeport to offer them. We have heard the appeal from Newburgh, N. Y., whose prospective short-

Plan of Loveland Farms, Coitsville Township, Ohio. John Nolen, Landscape Architect

age amounts to 2,000. Not to multiply instances, but to sum them up, we are told that government contracts now pending will require the transfer, within a very few months, of no less than 136,000 workers, five-sixths of whom must be placed in the already congested regions of New England and the other Eastern states. The accommodations for receiving this army being practically nil, it is obvious that the situation rapidly approaches the intolerable. The task is too big for the employer; it is too big for the municipality or the state. The emergency is national in scale. Happily, there are signs that federal authorities are becoming alive to the situation. Let us hope that traditional reluctance will not prevent action upon a scale as broad as the need.

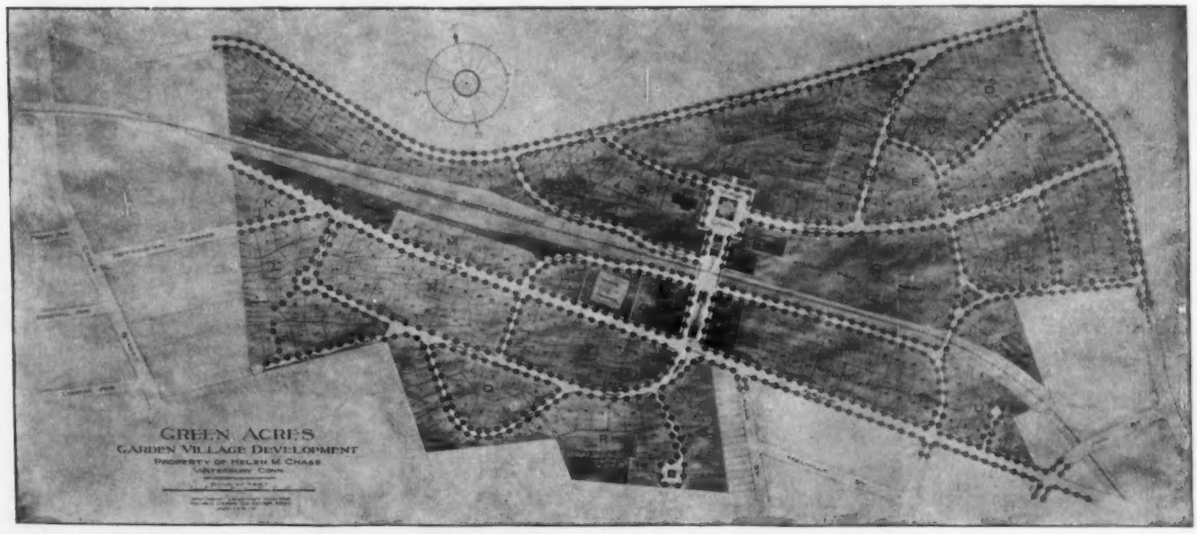
In subdividing the matter of industrial housing, we have distinguished, somewhat arbitrarily, two main types. They are, to be sure, traversed by cross currents, and merge into each other at many points; but if not regarded too rigidly the distinction is useful. Roughly, then, we may speak, first, of the industrial village proper, where an employer seeks to house his own working force, and in doing so provides an industrial housing development which is (or approaches) an independent community; second, of the town or city where a housing corporation or similar agency seeks to provide housing facilities for workers in order to meet an acknowledged shortage, but irrespective of any particular industry or concern.

War-time housing might fall into either of these classes; that is, should government aid be confined to an advance of money to further housing developments already planned but held up for lack of funds, its action would doubtless be impartial as between housing corporation and individual employer. Or, in the event of our own country following England's example by taking up the building program itself, government activity would in all probability include both the independent munition town, comparable to Well Hall in England, and the industrial suburb or section of an already existing community.

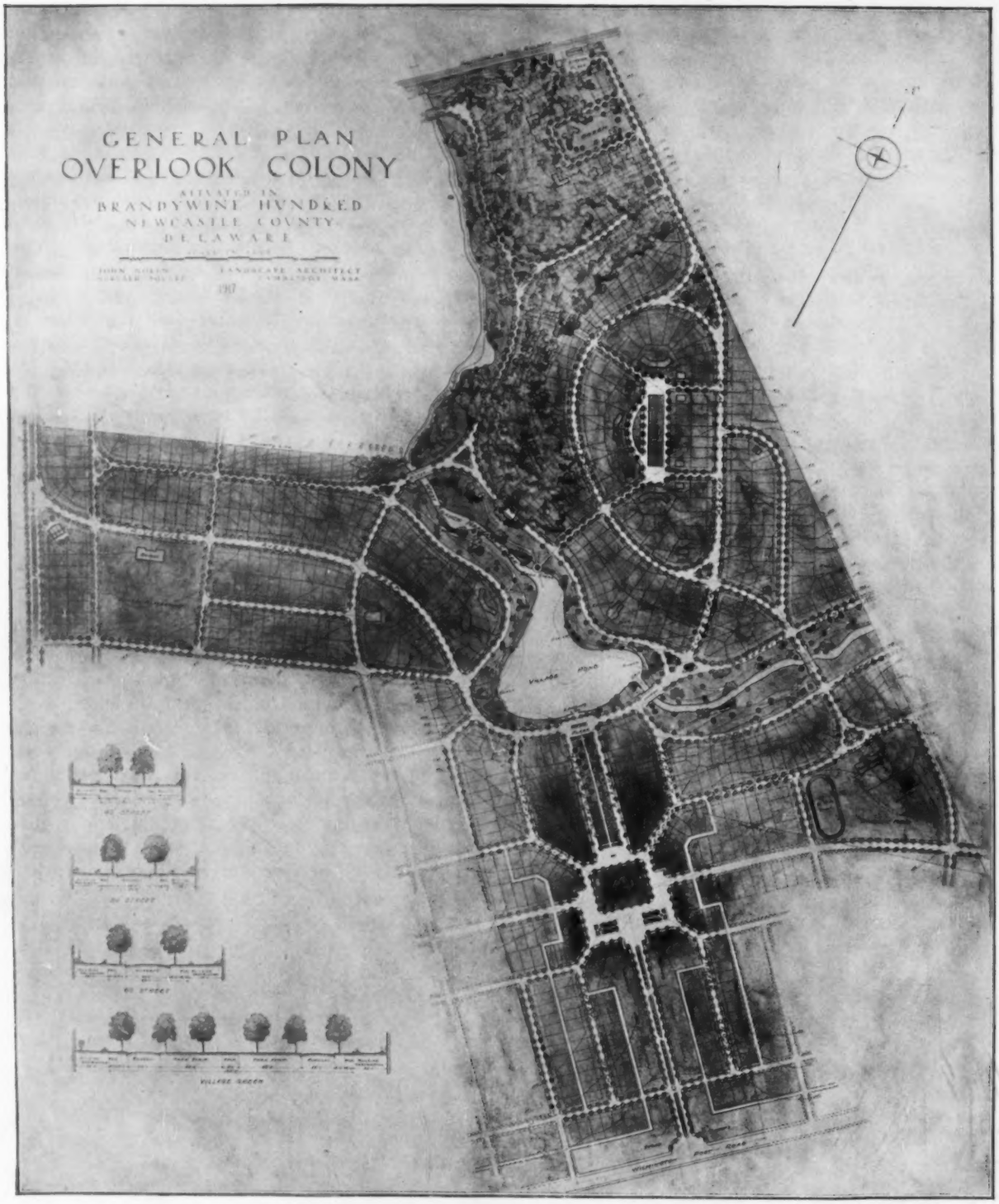
Among those who have been identified from the first with problems of industrial town planning, none has thought more deeply nor practised more widely than Mr. John Nolen of Cambridge. The general plans which we are privileged to reproduce herewith give hints of an exceptional range of activity; they are at the same time suggestive of the individuality which attaches to each industrial problem, and which must dictate its solution.

Of these plans, all except one come within the class that we have called the industrial village proper; that is, a housing development created primarily to care for the employees of a single concern. The exception is found in the plans of Kingsport, Tenn., where a corporation has set out to meet the housing needs of an entire town — a town whose phenomenal growth has far outstripped the possibilities of home building under private initiative.

Looking at these plans even casually, certain characteristics are immediately noticeable. Some have to a very great degree the qualities of independent, self-contained units; others reflect, even on paper, something of the fragmentary, incomplete aspect which was very marked in the original conditions of the problem, and which the most skilful treatment by the town planner cannot wholly obviate. This desirable unity and completeness in a community plan may be inherent with the property itself, or it may to some extent be attained; that



Plan of Green Acres, Waterbury, Conn. John Nolen, Landscape Architect



GENERAL PLAN OF OVERLOOK COLONY, BRANDYWINE HUNDRED, NEWCASTLE COUNTY, DELAWARE

JOHN NOLEN, LANDSCAPE ARCHITECT

AN exceptionally interesting and successful development in spite of severe handicaps in irregularity of boundaries and contour of property. The three isolated arms of land have been brought into a unified and coherent scheme by carefully located arteries of travel, and the development of the central depression into a parked space to be enjoyed by all members of the community. This plot also illustrates the difficulties encountered by the town planner when the limiting boundaries of the property are not sufficiently definite to insure independence of developments occurring on adjoining sites.

is, for the first, the tract may be fortunately bounded by natural features, such as a river, a forest, a park, or an important thoroughfare. Any one of such features will give definition to the property, and will go far toward enabling the town planner and the architect to produce within these bounds the atmosphere that should pervade the well planned community. Note, for example, Kistler Industrial Village, with two sides of its triangle, bounded, the one by a river, the other by the railroad; similarly in the Loveland Farms tract, note how the broad thoroughfares on two sides, and the factories on the third, perform the same function. Lacking such topographical aids, the sense of unity must be produced artificially if at all. To do this requires a wise co-operation between owner and town planner, and it is here that the owner often fails to realize the best possibilities of his project by not calling for expert advice until too late. The town planner ought to be developing his studies at the same time that the owner is carrying on negotiations for the land he needs for the new development. Only so will the relative importance of various plots become evident; only so can be avoided the state of affairs that too frequently occurs — an essential street connection blocked because the land is adversely owned and held at a prohibitive figure. Co-operating with the planner, the owner may usually acquire his land quietly, without publicity, until the essentials for his program are in hand. They will act without publicity, not in order to take advantage of previous owners, but simply to avoid being themselves taken advantage of by others. Such a procedure, adopted in the case of the Neponset Garden Village at Walpole, Mass., worked out with generally satisfactory results. The most important plots were acquired at equitable figures, and those not so important were worked into the plan as they stood.

When the planner enters the problem late, unfavorable property lines must usually be regarded as fixed — one of the given conditions, at the best, to be transformed into an opportunity; at the worst, to be accepted and ameliorated so far as may be. Looked at from this point of view, the plan of Green Acres, at Waterbury, Conn., is not equally fortunate with that, for instance, of Loveland Farms. In several portions it shows cases where lotting is not ideal, where economy of street development is not to be wholly attained, and where the executed work must fall short of its possibilities, were the artificial boundaries of the property less exacting.

Among the desirable natural boundaries of a development we listed a river. That term should be understood in its literal sense — not as meaning any piece of water, large or small. The point is, it must, in fact, *bound*, that is, it must be of sufficient size to form a real limitation. A river or a lake will do this acceptably, whereas a small stream marking the property line is usually a serious detriment. The planner may find such a stream of great natural possibilities for a boundary park; yet controlling only one bank he is powerless to realize the ideal, if the opposite side happens, as it usually does, to be left in an unsightly, unsanitary, or run-down condition. Or supposing the lay of the land suggests a community swimming pool for summer, a skating pond for winter — however ideal the location, however slight might be the expense involved, nothing can be undertaken which will flood any square foot of the opposite bank. In somewhat the same way a boundary street has its disadvantages. To be sure, the planner is not here prohibited from developing as he likes on his own side, but he cannot hope to gain his effect of unity in the face of an uncontrolled development across the street.

One would say at once that the obvious solution for such difficulties is in co-operation with adjoining property owners. So it is, provided they will consent to co-operate. In case the land in question is owned by one individual or one company, it can often be managed, for self-interest will point out the advantages of co-operation. It is when the land is held by various interests, under varying conditions, that the real (and the usual) difficulty arises. In such cases it is hardly to be expected that those not primarily interested will attain a concert of action, especially such as will commit them to a line of action or, perhaps, restriction for a term of years.

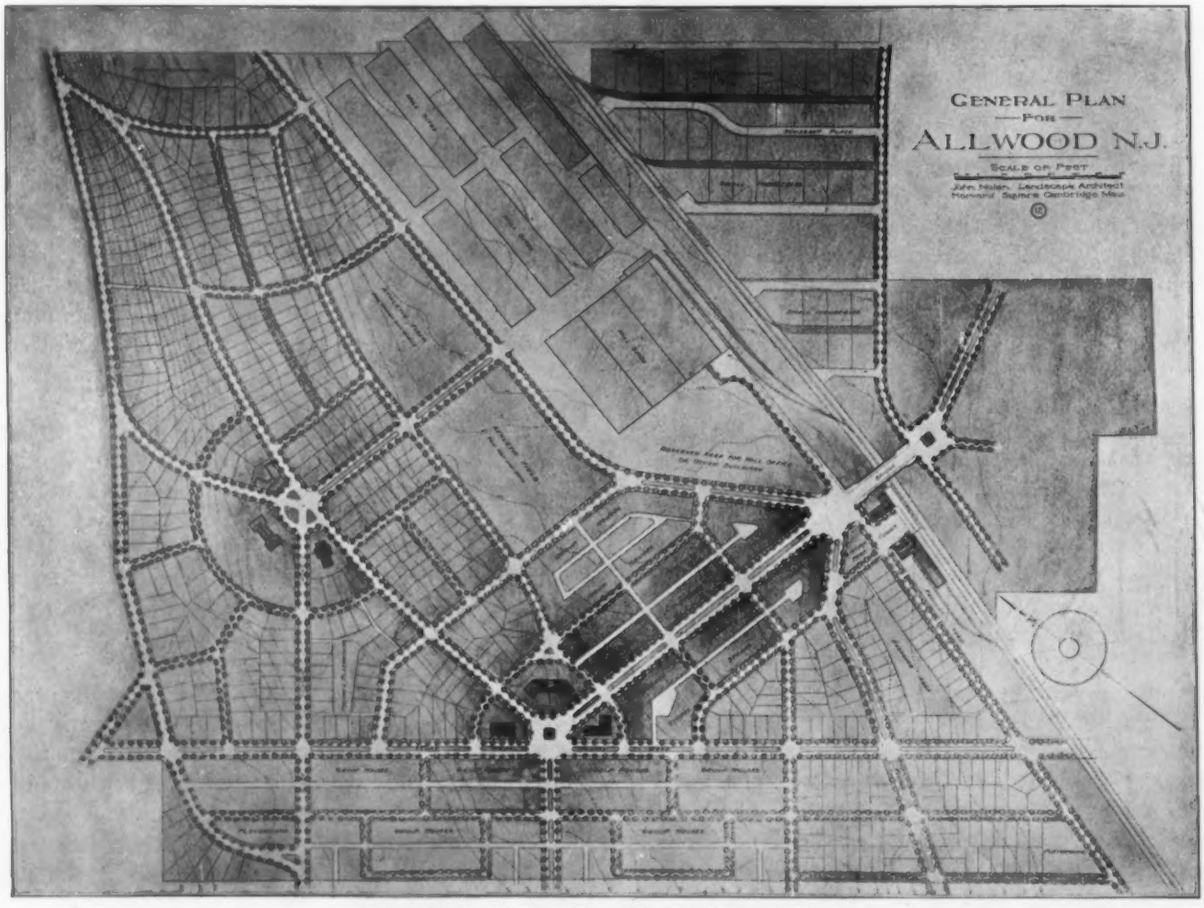
By far the best place for an artificial boundary, from the town planner's standpoint, is along the rear lot lines; that is, in any block the property owners will all face a street wholly within their own community, and will turn their backs upon the property adversely owned. We do not, in this, advocate adopting such a method as a rule of general application. To do so would be to violate a town-planning fundamental — the articulation of the new street layout with the main, through arteries of traffic and transportation; the provision of a natural circulatory system, not only within the community itself, but with relation to other communities on every side. Some of the most troublesome conditions in the older, middle-sized cities are those that have arisen when villages that were formerly far apart have gradually grown toward each other to the meeting point, only to discover that their thoroughfares were totally unrelated, and could not be hooked up without large outlay for replanning.

The general plan of Overlook Colony contains illustrations of several of the points we have mentioned. As it stands, this is a very successful and beautiful piece of work, and it is so in spite of several conditions that were exacting — not to say exasperating. First of all, the outline of the property is anything but conducive to unity, its jogs and angles are haphazard and unrelated; second, the boundaries are

nearly all artificial and indecisive. Beginning at the extreme northern corner, all down the eastern side, around to the parked thoroughfare on the west, no portion of this tract can be made invulnerable to harm from adjoining land; the northern boundary of the western tract is, as we have seen, good — the lots front on a street of their own and are comparatively independent of what happens to the rear of them. Similarly, the railroad at the extreme northern boundary is an effectual line of demarcation; between these areas, note that the property line runs with the center of the stream. Here the whole fate of that wooded valley may be said to depend not so much upon the art of the landscaping on the side of the Colony as upon the character of the opposite bank. Third, and most important of all as affecting the property itself, the topography would have been the despair of the old-style real-estate operator. Now that the solution is before us, we see that it is the only one. That depression of twenty feet or more in the middle of the development, with the creek running through it at the bottom, was a "jumping-off place" as one walked north from the Wilmington Post Road; but, build a small dam at the eastern outlet to the natural basin and we have at once the axial feature around which the whole plan is designed; put a bandstand across the pond from the head of the village green, leave the grass slopes of the valley natural and open to the public, and we have at once the elements which not only make for a wholesome community life, but make such a life difficult to avoid. It would be hard to find a better example of a case where a seeming serious handicap had been made a valuable asset.

The general plan of Allwood is particularly interesting because it presents one of the best American examples of clean-cut, industrial town planning. Here all active work on the site was preceded by study of the best work of other countries; experts were early retained to cover the several departments, and, what is more unusual, the factory locations and layout were considered as an integral part of the general plan. In other words, this plan of Allwood displays all the features of comprehensive planning, of zoning, of generous reservations for public and semi-public uses, of gradation of street widths and lot sizes to respective uses — all those features which have been best exemplified in the Garden Village of Letchworth in England. Not only Allwood, but every one of these plans of Mr. Nolen's will bear the closest scrutiny and will repay minute study.

(To be continued.)



Plan of Allwood, N. J., John Nolen, Landscape Architect

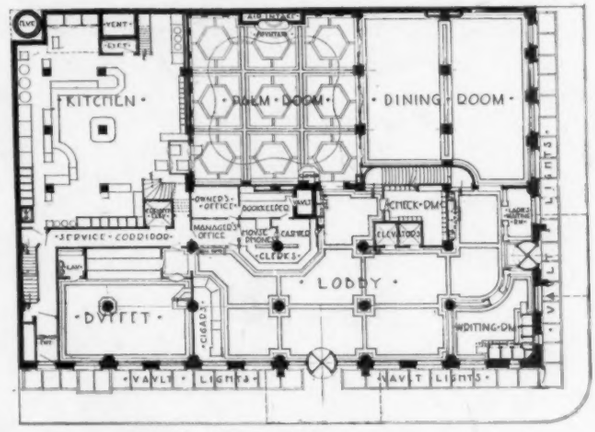
The Statler Idea in Hotel Planning and Equipment

III. SAMPLE ROOM FLOORS AND RESTAURANT SERVICE

By W. SYDNEY WAGNER
Of George B. Post & Sons, Architects

IN the preceding article it was my endeavor to expose in detail the salient points of the Statler idea as it is expressed in the planning and equipment of the typical floor. My reason for this detailed exposition was, as I stated therein, that nowhere is the expression of this idea more clear cut and characteristic, more readable to him who runs, more important as a factor of success, than in this typical floor.

In the planning and equipment of the other parts of the hotel this great idea is just as much a guiding lamp, an inexorable standard of judgment, and as fully developed as in the typical floor. Yet the very character of these other parts, their complex and more varied functions, makes its expression less apparent and impossible of concise typical exposition within the scope of this article. It must suffice, therefore, to touch upon only the more important and general manifestations of the idea in these parts. Of these, the expression of the sample room floor as exemplified in the Detroit and St. Louis hotels is the most significant.



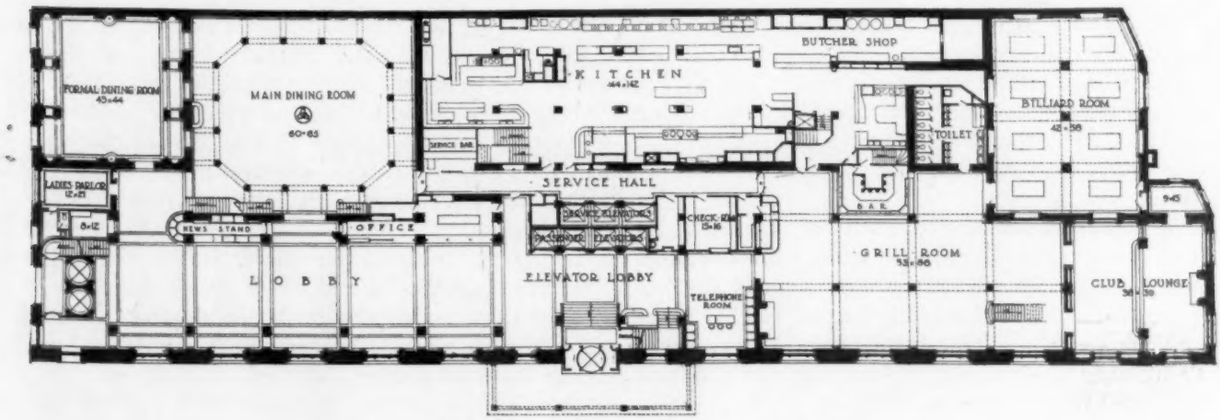
Main Floor Plan, Hotel Statler, Buffalo, N. Y.
Esenwein & Johnson, Architects

In the two earlier hotels these rooms form an integral part of the typical floor. They are large rooms devoted to the display of samples of merchandise. Salesmen's samples are usually packed in large trunks, and the rooms are therefore located with special reference to their accessibility from the freight elevators.

These rooms also serve as sleeping rooms for the merchant displaying his goods, and it was this function that first determined their grouping as a part of the typical guest room floor.

It was found, however, that there were many objections to this arrangement. The dragging of the heavy sample trunks along the public corridors was objectionable to the other guests, and also caused much damage to the walls and trim. In the later hotels, therefore, these rooms are found removed from the typical floor, and grouped into separate sample room floors. In the St. Louis hotel these rooms form three complete floors located below the typical guest room floors, and just above the helps' dormitory floor.

The advantages of this arrangement are many. The corridors, rooms, walls, doors, and door frames can be designed to withstand the rough usage incident to the handling of the sample trunks; the freight elevator service necessary in this handling is reduced in run, and consequently is capable of better service; persons calling to inspect the display of samples do not feel that they are intruding upon a



Main Floor Plan, Hotel Statler, Cleveland, O.
George B. Post & Sons, Architects

sleeping room floor — it permits of architectural expression on the exterior through the use of larger windows, and consequently provides better light for these rooms. It facilitates the service of the room clerk in the front office, because it differentiates most distinctly on his room rack the sample rooms from the guest rooms and prevents confusion.

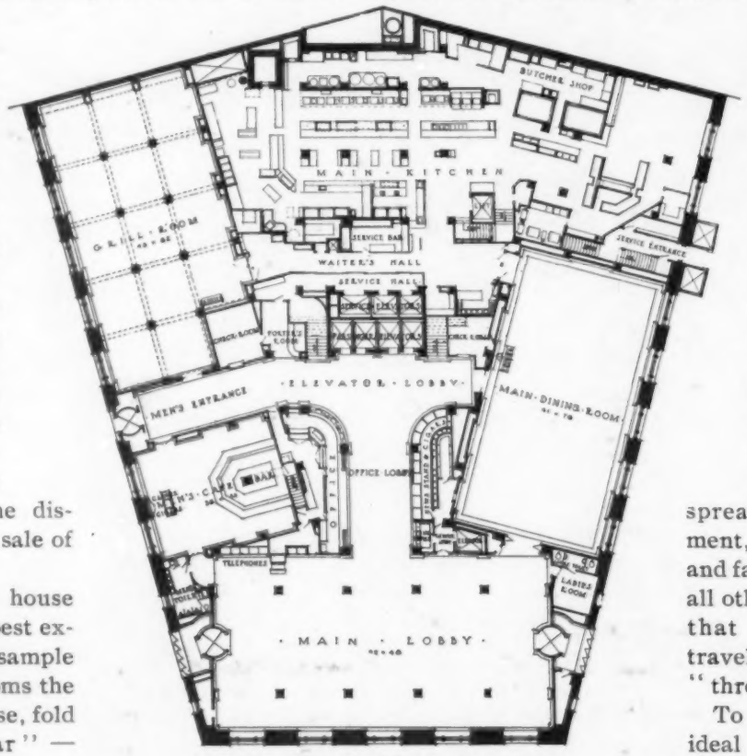
The sample room must provide a dual service. Primarily it must be suitable for the display, to their greatest advantage, of the various kinds of merchandise and samples. Secondarily, as the merchant, for reasons of economy and surveillance, usually demands sleeping and living accommodations in the same room with his display, it must provide these without interfering with the display, inspection, or sale of the merchandise.

In the St. Louis house will be found the best expression of the sample room. In these rooms the beds, when not in use, fold back — "disappear" — into a ventilated closet, and the dresser and the entrance to the bathroom are located in an alcove. This arrangement leaves the room proper clear of all furniture other than that required for sample display purposes; provides the maximum amount of wall space, and removes from sight all suggestion of a sleeping room, which might be objectionable to visitors calling to inspect the display. This last is of particular importance where the display is of such character as to attract women visitors.

The details of the plan, equipment, and furnishing of these rooms all reflect the constant effort always to provide better service. In this case it is display service.

The radiators are low to permit of sample tables being placed over them; the room door openings are of extra width to allow the passage of the big sample trunks, and the jambs are of steel to withstand the wear and tear incident to their passage. The lighting fixtures and receptacles are designed and located to give the best lighting to the greatest variety of merchandise. The color tones of the wall, floor, and furniture coverings are neutral, forming a quiet and helpful background, rather than the usual assertive anvil-chorus, to the display.

Next in importance to the guest room and sample room service of the hotel is the restaurant service. This includes not only the public dining and banqueting rooms, but also the service dependencies of these rooms located on the principal floors, and of these the kitchen is by far the most important.



Main Floor Plan, Hotel Statler, Detroit, Mich.
George B. Post & Sons, Architects

It might well be maintained that this service is of equal importance with that of the guest rooms, for, no matter how perfect the room service may be, if the hotel lacks good restaurant service it can never attain a full measure of success. If, on the other hand, this service is of such distinctive character as to create widespread, favorable comment, it will lift the name and fame of the hotel above all others. It is still true, that the way to the traveling public's heart is "through its stomach."

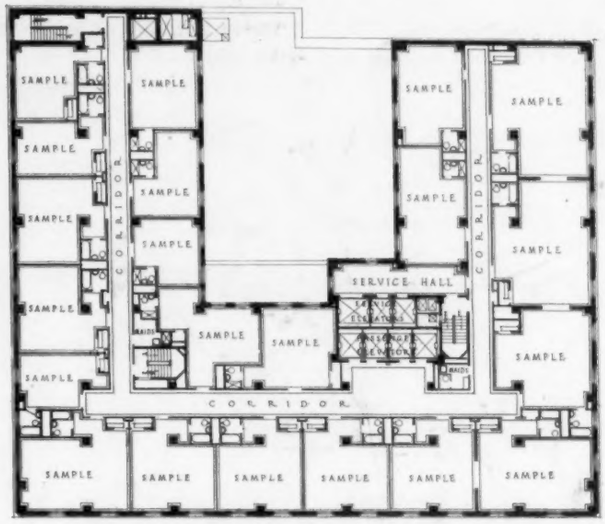
To make possible this ideal of service involves the proper location of dining rooms, not only in relation to the convenience of the guests and public, but also to their accessibility from the kitchen and their other service departments. To produce efficient and economical service, the kitchen should, if possible, be located on the same floor as the main dining room. This is of particular importance in the smaller cities, where it is at all times difficult to secure efficient waiters. If, then, the waiter is compelled to constantly climb up and down the stairs during his service, he will soon leave to seek more comfortable employment. In the larger cities such as New York, which is the waiters' Mecca, this objection is of lesser degree, but it remains an objection nevertheless.

In the planning of the Statler Hotels, one of the fixed requirements is, and has been from the inception of the first hotel for this company, that the main kitchen must be located on the same floor level as the principal dining rooms.

To this principle has been sacrificed the possibility of securing much valuable outside rental space on the ground floor in the form of stores and shops —

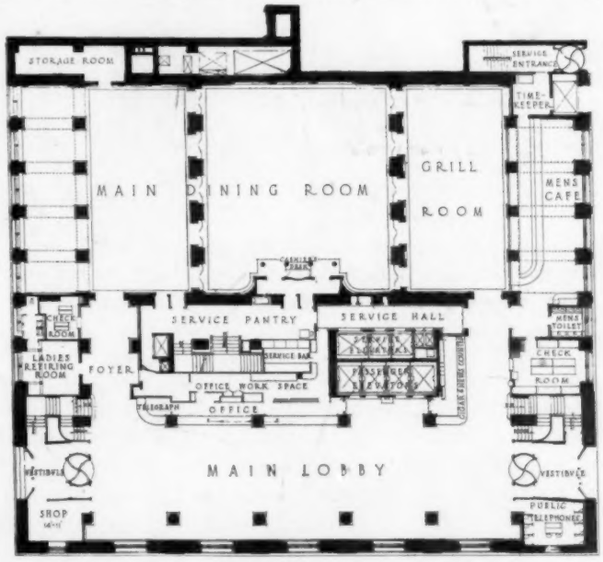
rental space which in the majority of instances is in other hotel plans the governing factor that controls the architect in the arrangement of the public floor and in the relations of kitchen and dining rooms.

While the merits of this principle may be difficult of justification from the short-sighted standpoint of financial returns, yet its value as a means of securing better *service* is unquestionable. It "does its bit" toward producing a perfect hotel, and in this lies its true virtue.



Sample Room Floor Plan, Hotel Statler, St. Louis, Mo.

Only where, as in the St. Louis hotel, the ground area was so restricted as to make it impossible to apply this principle without seriously dislocating the other essential units of the ground floor plan, was the kitchen of necessity placed in the basement; and here the unusual importance attached to this dining room service is clearly apparent in the planning and equipment of the service pantry on the dining room level —a pantry equipped with refrigerators, warmers, silver and plate racks, and service bar; with an endless chain dish conveyor to carry all soiled dishes to the dish-washing department below; with a linen chute to carry the soiled linen to the laundry; with a double stairway designed to prevent the crossing or congestion of waiter traffic. It is apparent in the myriad details of arrangement in the kitchen below, where everything required by the waiter is in relative proximity to the service stairway.



Main Floor Plan, Hotel Statler, St. Louis, Mo.
George B. Post & Sons and Mauran, Russell & Crowell, Associate Architects

Many owners, and most architects, fail to realize the importance of this principle. To many the lure of high revenues from store rentals is irresistible; the statement of the estimated earnings of the proposed hotel, swollen wonderfully by the figures for these store rentals, proves the convincing argument in relegating the kitchen to another floor, under conditions where it is possible and highly desirable, from the standpoint of adequate service, that it be kept on the same floor with the dining rooms.

As a horrible example of this sort I wish to mention one with which I am familiar—one which is particularly flagrant because of the prominence of the building, the lack of necessity for doing what was done, and the utter absence of judgment and responsibility displayed in the arrangement of the plan. This was an hotel project representing an investment of over thirteen millions of dollars. The ground area was such as to permit of an ideal solution of the problem, yet the entire plan was made subservient to the stores placed on every frontage. The main dining room, on a mezzanine floor, was not visible from the lobby, nor easily accessible from the elevators or stairways. The main kitchen was placed in the basement, *two full floors* below the dining room, and as a crowning climax to this grim and costly comedy of plan, the service between kitchen and dining room depended upon an escalator stairway of a new, unproven type. This stairway broke down completely under the first day's service and could never again be operated. For months thereafter the management was forced to depend upon a small, secondary, and wholly inadequate kitchen for this most important dining room service. The escalator has been removed and thousands of dollars spent to remedy this defective service condition, yet the service can never be made satisfactory without radical and practically prohibitive changes in the public floors.

In other hotels the kitchens have been located on a floor above the dining room, making it necessary for the waiters to serve downstairs. Now, if there

is one thing more difficult and trying to do than to carry a loaded tray upstairs, it is to carry one down — one trial will convince any one. Yet many hotels are designed (but by no means operated) in blissful ignorance of this fact.

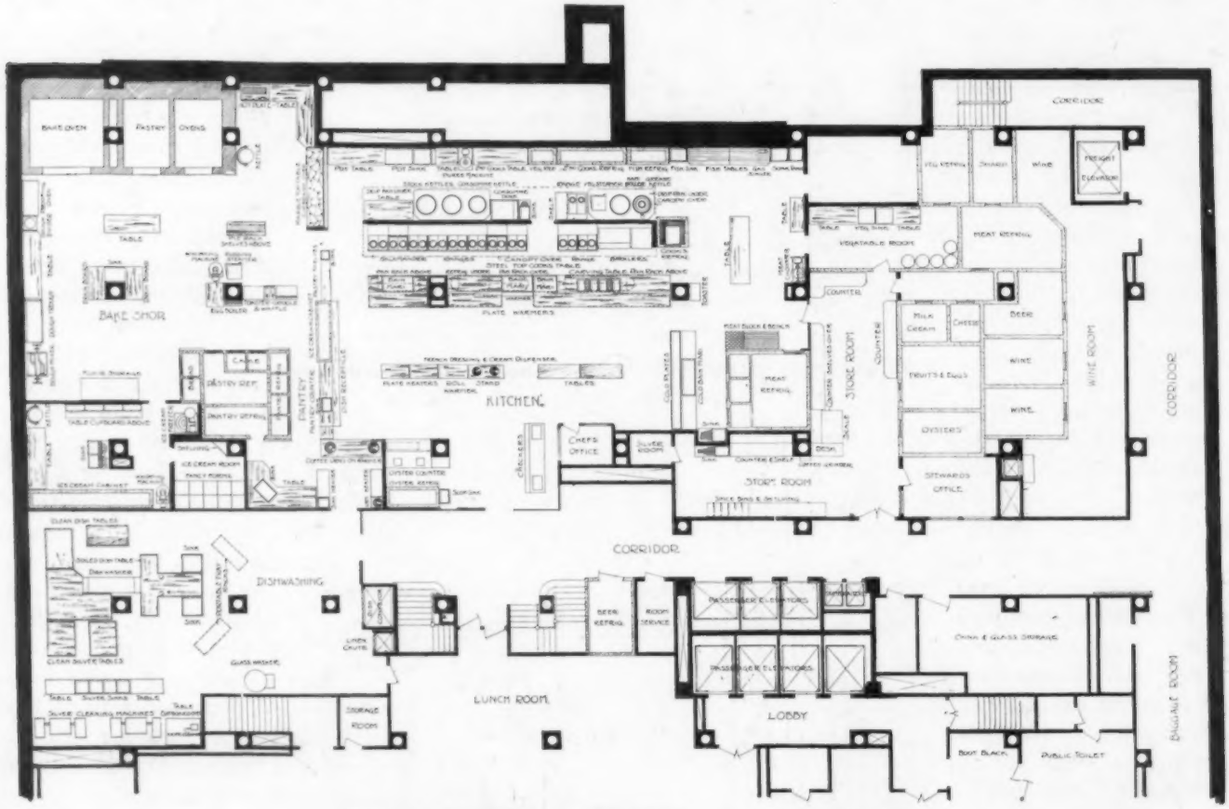
The details of the Statler kitchen, with its many departments of food storage, preparation, cooking, and service; its many problems of ventilation, draft, refrigeration, heating, and circulation; its dependent departments of dish washing, baking, silver cleaning and repair, room service, etc., are of entirely too technical and varied a character to permit of even the most superficial exposition here. The kitchen of the St. Louis hotel reproduced here in plan, and characterized as the best of the Statler kitchens, must therefore suffice.

Sufficient also, I believe, have been the discussion and examples given of the Statler idea as expressed in the plan and equipment of the buildings to show wherein these hotels differ from others, and to explain the simple reasons for these differences.

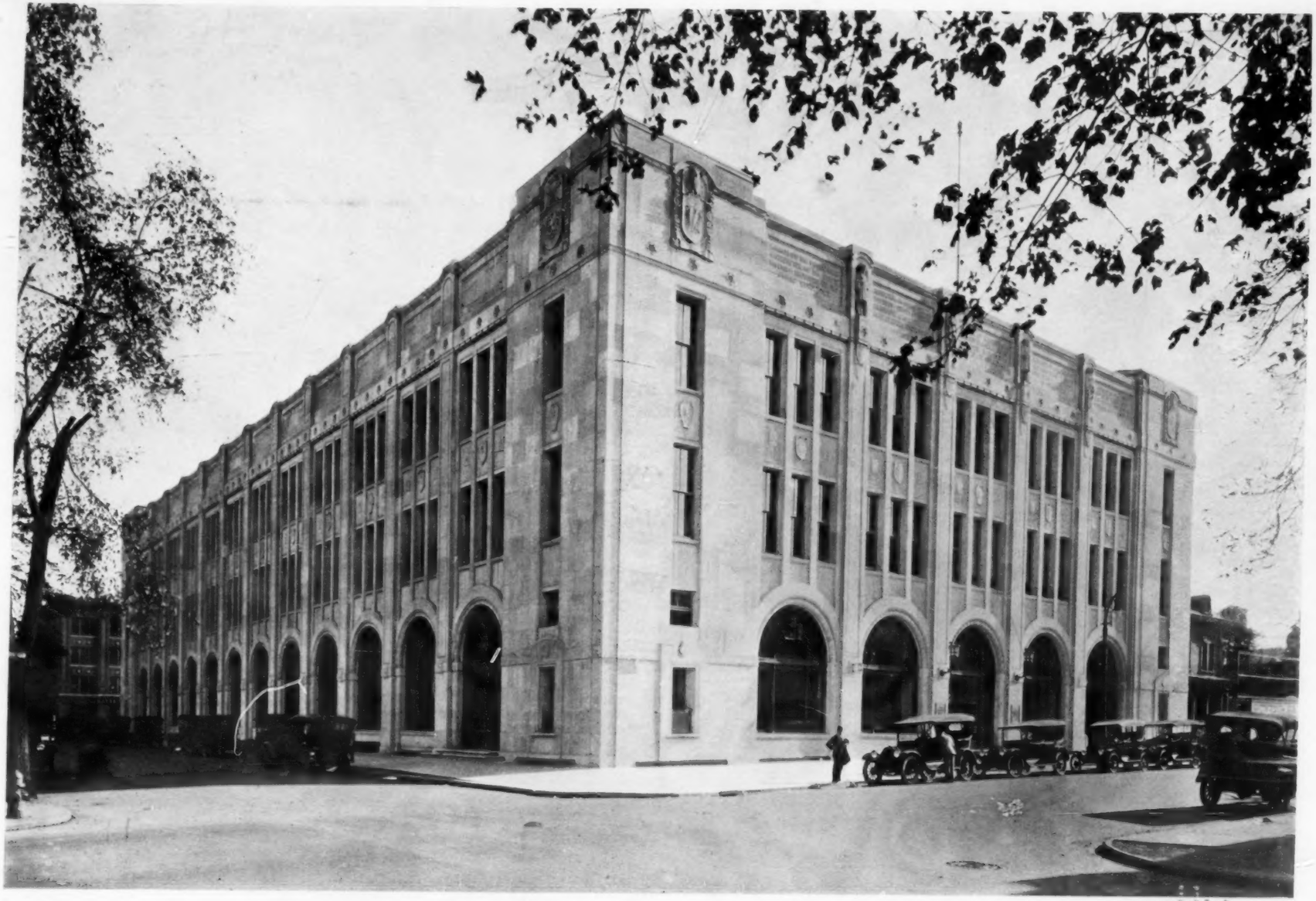
Any further discussion and examination of the other and less typical differences would only add to the burden of proof already given of the singleness of idea behind them; would only drive home more clearly the fact that this idea is applied to and expressed in every part of the hotel structure, from the plan of the typical floor to the profile of the smallest moulding on an obscure wall.

This idea, as I have shown, is not a mysterious something concealed behind a veil of secrecy and accessible only to the initiate — it is simply the idea of *service*.

It is the constant effort, the absolute necessity of realizing and upholding these high ideals of service, which has resulted in so clear a demonstration in the plan and equipment of the Statler Hotels of the principles of simplification and standardization. It is to these two great principles and to the high ideal of service that the architect must look for the ultimate solution of that now most complex of his problems, the modern hotel.



Detailed Floor Plan of Kitchen, Hotel Statler, St. Louis, Mo.
George B. Post & Sons and Mauran, Russell & Crowell, Associate Architects



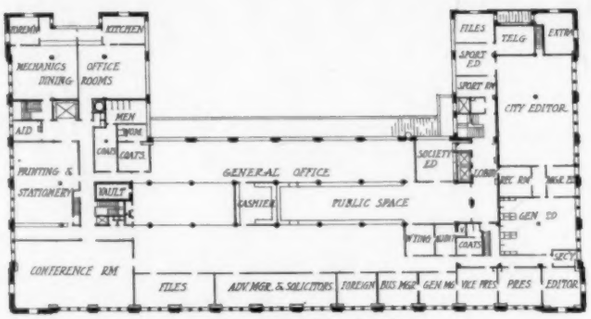
THE DETROIT NEWS BUILDING, LAFAYETTE BOULEVARD, DETROIT, MICH.

ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE

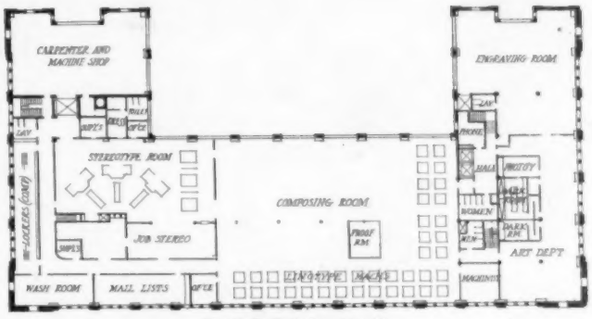
DETAIL OF MAIN ENTRANCE

THE DETROIT NEWS BUILDING, LAFAYETTE BOULEVARD, DETROIT, MICH.

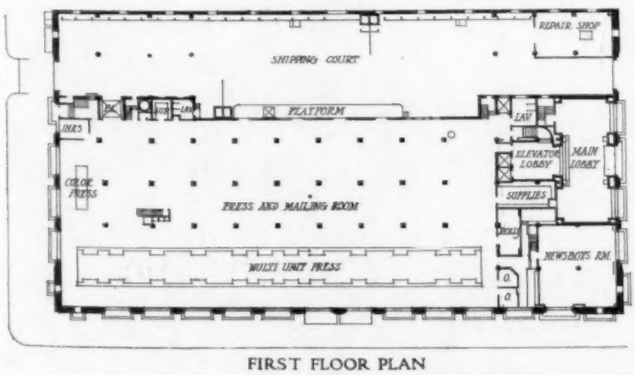
ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE



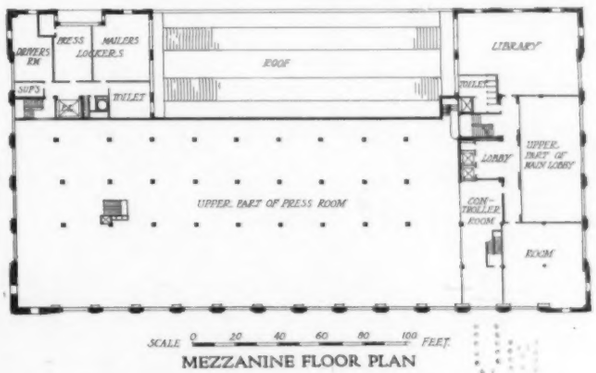
SECOND FLOOR PLAN



THIRD FLOOR PLAN



FIRST FLOOR PLAN



MEZZANINE FLOOR PLAN

THE DETROIT NEWS BUILDING, LAFAYETTE BOULEVARD, DETROIT, MICH.

ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE

ENTRANCE LOBBY

SECOND FLOOR CORRIDOR

THE DETROIT NEWS BUILDING, LAFAYETTE BOULEVARD, DETROIT, MICH.

ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE

RECEPTION ROOM OF PRESIDENT'S OFFICES

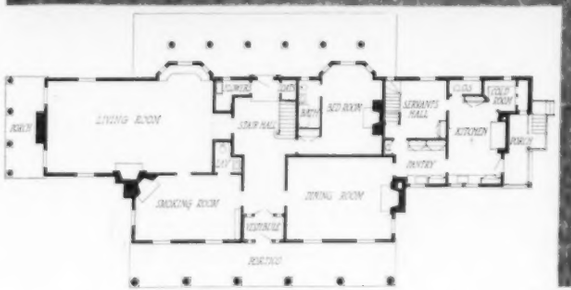
TYPICAL PRIVATE OFFICE ON SECOND FLOOR

THE DETROIT NEWS BUILDING, LAFAYETTE BOULEVARD, DETROIT, MICH.

ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE

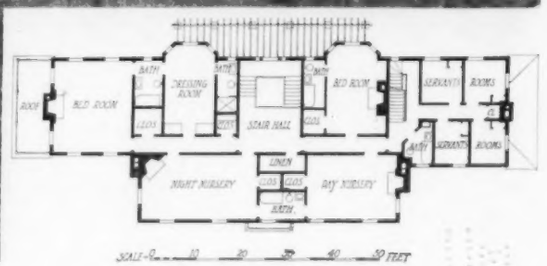
HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y.

JOHN RUSSELL POPE, ARCHITECT



FIRST FLOOR PLAN

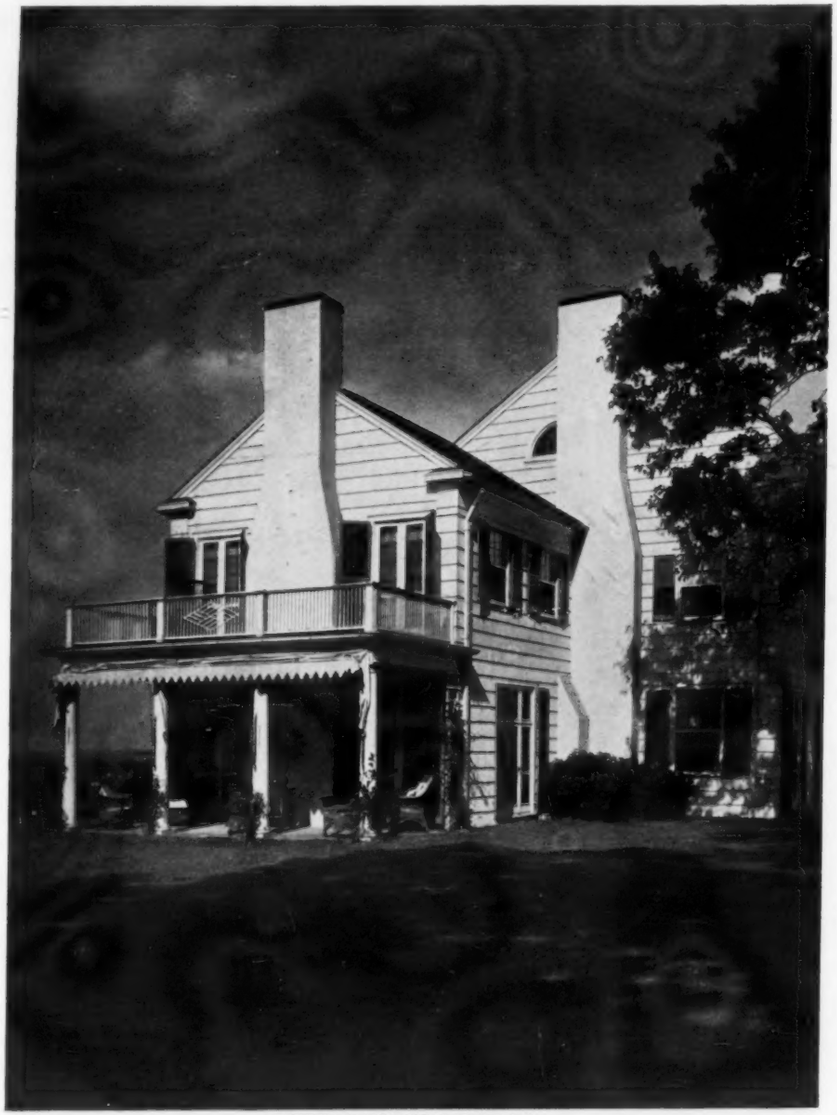
VIEW OF GARDEN FRONT



SECOND FLOOR PLAN

HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y.

JOHN RUSSELL POPE, ARCHITECT



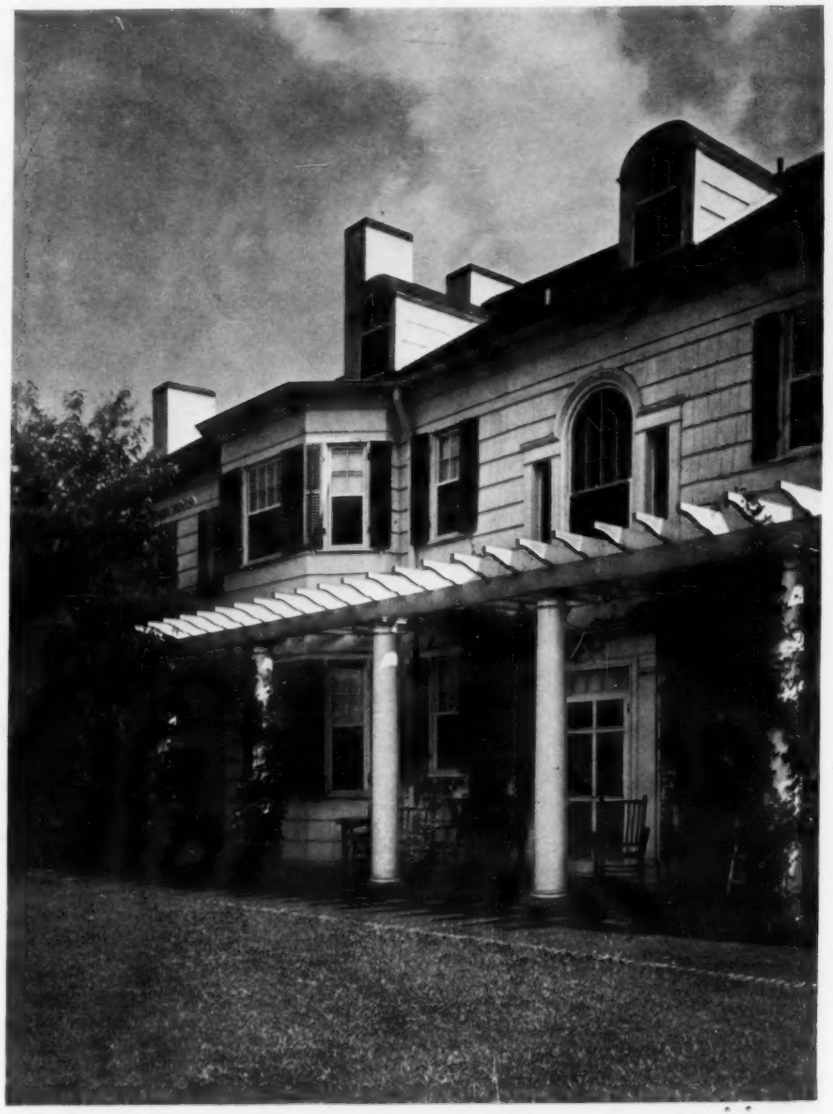
VIEW OF LIVING ROOM END

VIEW OF SERVICE END

HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y.

JOHN RUSSELL POPE, ARCHITECT

DETAIL OF ENTRANCE SIDE



DETAIL OF GARDEN SIDE

HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y.

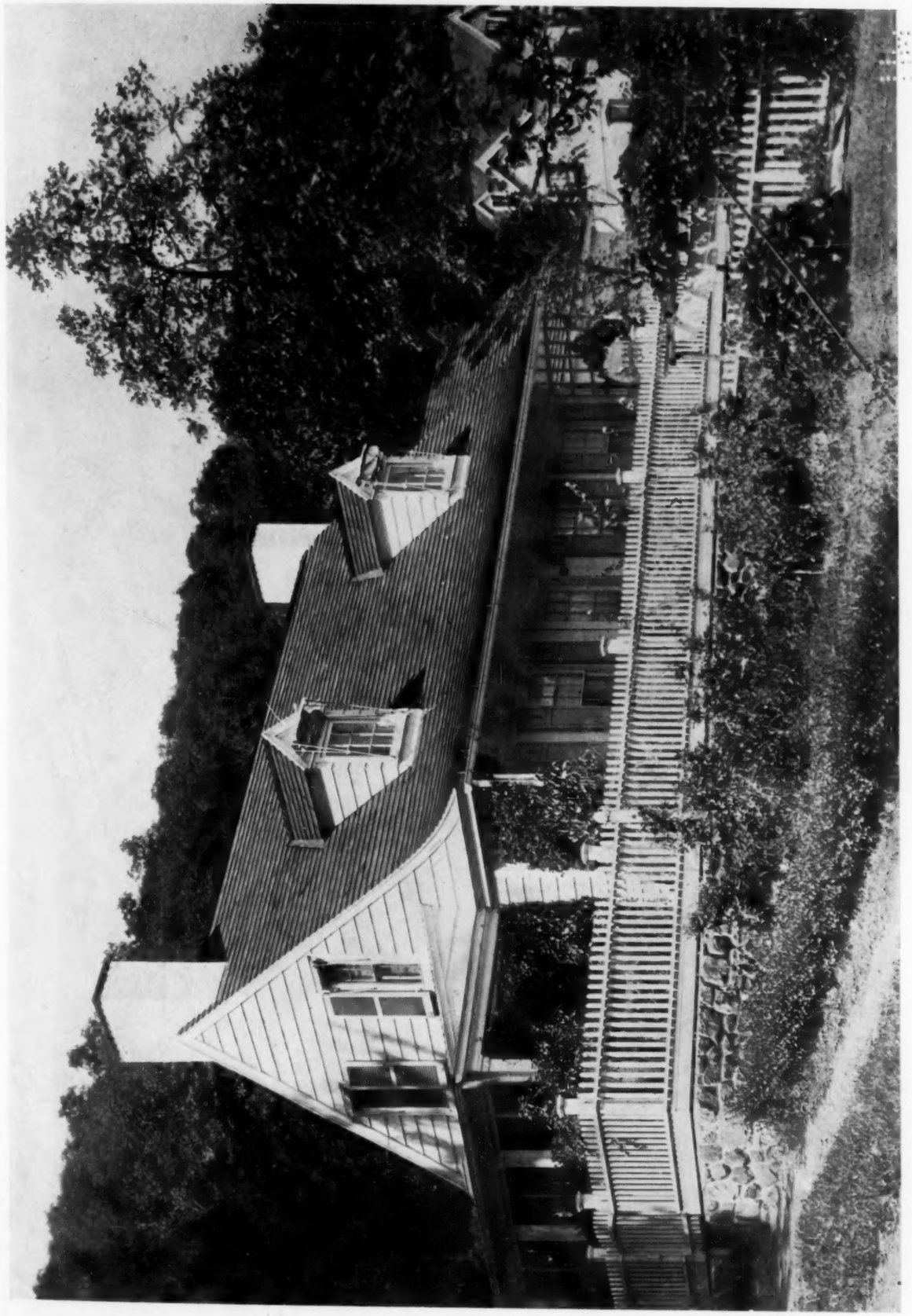
JOHN RUSSELL POPE, ARCHITECT

DINING ROOM

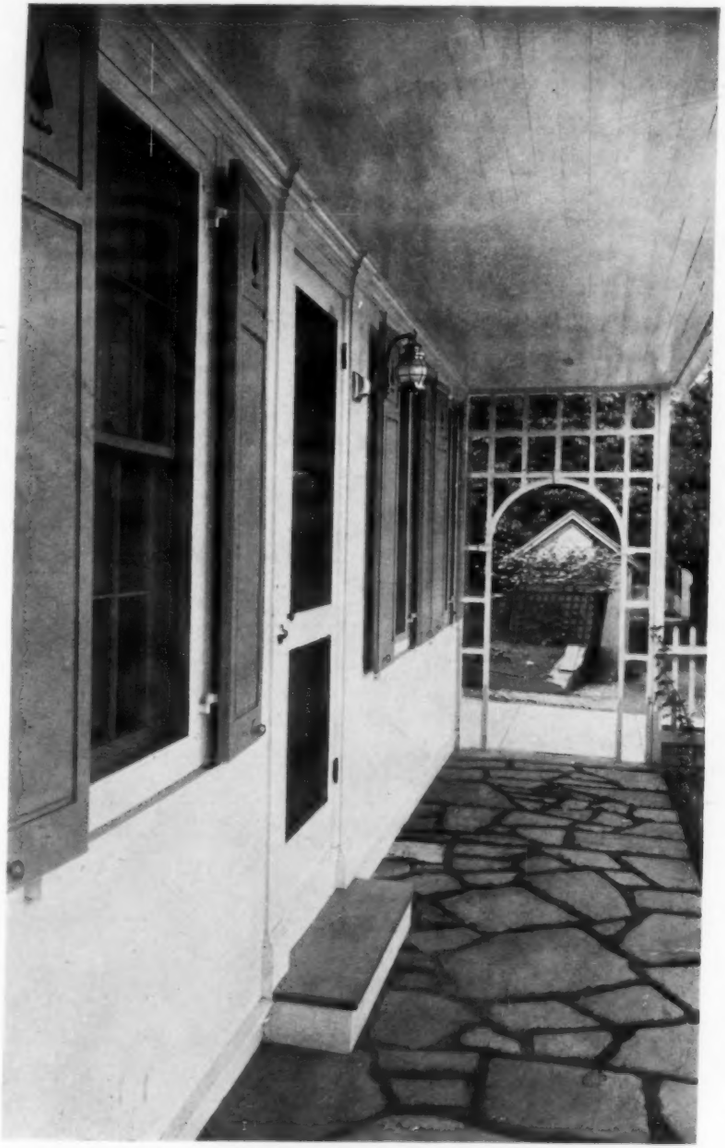
HALL AND STAIRCASE

HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y.

JOHN RUSSELL POPE, ARCHITECT

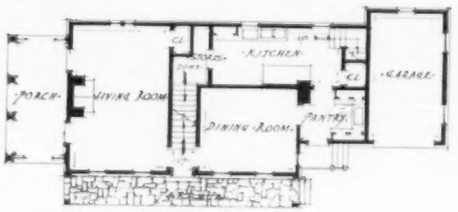


HOUSE OF MRS. W. H. FALLON, SPARKILL, N. Y.
AYMAR EMBURY II, ARCHITECT

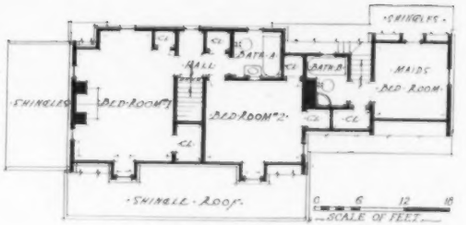


VIEW ALONG TERRACE

VIEW OF SERVICE END



FIRST FLOOR PLAN



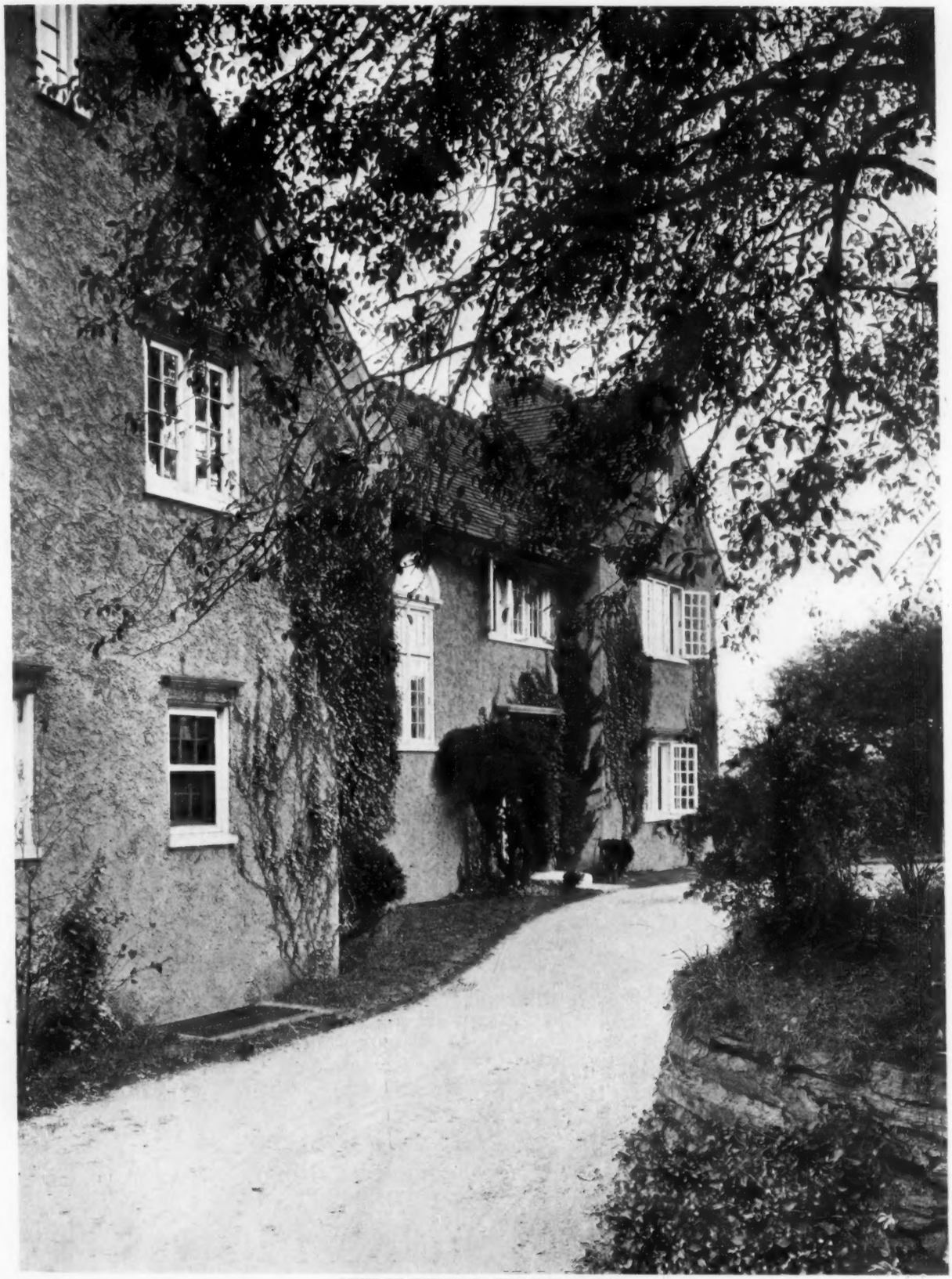
SECOND FLOOR PLAN

HOUSE OF MRS. W. H. FALLON, SPARKILL, N. Y.

AYMAR EMBURY II, ARCHITECT

HOUSE OF WILLIAM H. TROTTER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

BROCKIE & HASTINGS, ARCHITECTS

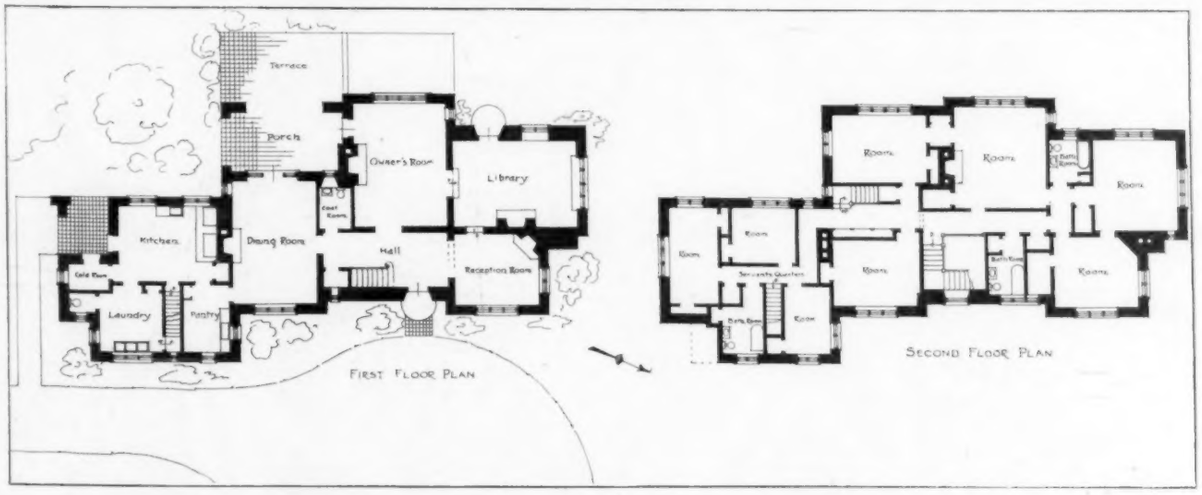


VIEW OF ENTRANCE SIDE FROM DRIVE

HOUSE OF WILLIAM H. TROTTER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

BROCKIE & HASTINGS, ARCHITECTS

VIEW OF GARDEN OR WEST SIDE



HOUSE OF WILLIAM H. TROTTER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

BROCKIE & HASTINGS, ARCHITECTS

DETAIL OF MAIN ENTRANCE.

DETAIL OF LIBRARY DOORWAY

HOUSE OF WILLIAM H. TROTTER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA.

BROCKIE & HASTINGS, ARCHITECTS

The Ironwork of Jean Tijou

II. HIS CRAFTSMANSHIP AT ST. PAUL'S CATHEDRAL, LONDON

By R. RANDAL PHILLIPS

TIJOU'S work at St. Paul's as may be seen from the accompanying illustrations was on an equally fine scale with that at Hampton Court described in the previous paper. All the ironwork in the cathedral is not Tijou's, — some was done by contemporary and later smiths, — but the major portion of it is, including the work in the choir, the balustrading to that amazing circular stairs which stands out straight from the wall of the southwest tower, the balustrade to the whispering gallery, and various grilles and gates. The most remarkable of all this work is that in the choir. It is well preserved and has not been much restored, or where restorations have been made, the work is very skilfully handled. It is not, however, in its original positions. The organ, now placed on either side at the entrance to the choir, originally stood in the middle, and the gates which now enclose the sanctuary, facing the north and south aisles, originally occupied positions under the organ case, facing west; while the elaborate rail across the entrance to the choir was originally the altar rail. The alterations were made when the new high altar was set up by Bodley and Garner in the last quarter of the nineteenth century.

The great gates facing north and south into the aisles, each consist of a central panel and two side panels, one of which opens, giving a way across the sanctuary in front of the altar, the panels being enclosed within a brass frame divided by pilasters and crowned by an iron overthrow. The central panels, and the one to the east in each case, together with the overthrow, are Tijou's; the remaining panels, that is to say the two opening gates on the west side, being modern work. The central panel, both north and south, is in reality made up of two gates, those facing the north aisle (with embossed plaques of the four evangelists in the corners, as shown in the illustration) having originally been the central gates under the organ, the two other panels, now fixed in the aisle screens, having been gates on either side. The new work is executed with astonishing skill, but the hand of the master is seen in the old work, in the perfection of the embossed leafage, and the beautifully preserved line of the scrolls. Adjourning these

Wrought Iron Panel in Back of Choir Stalls, St. Paul's Cathedral

screens are the gates to the ambulatory, which show Tijou's skill in another remarkable degree. The scrollwork in the filling of these gates has a filigree effect when seen silhouetted against the dark interior of the chapel, but it is not in the least "thin," being good smithcraft, free and flowing.

The St. Paul's accounts furnish detailed particulars of the work which Tijou supplied, and as indicating the manner of the time it is interesting to give a few extracts.

The first entry is for November, 1691, as follows:

To Mons. Tijoue ffor the Ironworke of two windows ffor ye Choire, vizt ffor 34c 1q 20 lb at 6d	96	08	00
ffor 45 foot runing of the Groteske bars	13	10	00
ffor workmanshippe of ye two Scrowles in ye keys	06	00	00

(signed) Reced
J. Tijou

Sept. 17, 1695*

*This date refers to the time of payment, nearly four years after the work was completed.

Central Gates, North Choir Aisle, St. Paul's Cathedral

Detail of North Choir Gates Shown at Left

(It does not say where this work was wrought, but as in most instances the entries state from Hampton Court, presumably the foundry was there.)

Many similar entries appear, covering nearly the whole of the windows, most of which were Tijou's work.

To John Tijoue ffor iron worke of the Rayles of Two Stair Cases	40	00	00
ffor two little windows in ye sd Staire ffor 12 paire hinges ffor Choire 14s each and 48 steel handles ffor the drawing seats in the Choire 5s each.	20	00	00

A number of "Groteske Panels" were supplied for the Choir, measuring more than 150 feet over all, at 40s per foot.

"Ye Iron Screene under ye organ case in ye Choire, 221 ft. super" was supplied by Tijou under a contract at £2 per foot.

Hopton, a Joiner, was paid "ffor gluing of boards for Mr. Tijoue to draw ye Iron screene upon and also for Mr. Gibbons, a model ffor seats in Choire and ye Altar, and ye Deans seat."

Tijou was paid £525 for eight windows supplied in January, 1700, the windows themselves costing £412 08d 06s," 8 scrowles for top of windows 40 00 00, and for 364 fete ornaments in ye double barrs of ye same 72 16 00."

The high railings which entirely surrounded St. Paul's were cast by Tijou at Lamberhurst, in Sus-

sex, and are believed to have been the last ironwork of any magnitude cast or wrought in that county. According to Miss Phillimore, Wren, who doubtless intended to employ Tijou, wanted a low, graceful railing of hammered iron, which, in all probability, would have included some of Tijou's finest work; but was overruled by the Commissioners, who determined that the railing should be a high one, and that it should be of cast iron. The western portion of this railing, together with the gates at that end, were sold in 1874 to an iron merchant at Bow, who disposed of it to a client in Toronto; but the vessel carrying the ironwork was wrecked, and the whole was lost, with the exception of a small portion that was salved and is now preserved in Canada.

From the accounts we know that Tijou was working at St. Paul's for twenty years, from 1691 till 1711, but after that date we lose all trace of him, and, like his beginning, his end is an unknown tale. But if we know so little of the man himself, we are fortunate in still possessing the bulk of the finest craftsmanship that was wrought either by his own hand or to his design and under his immediate supervision. We are also able to judge of the executive ability the man must have possessed, for shortly after his arrival in England the number of commissions he

Secondary Gate, North Choir Aisle

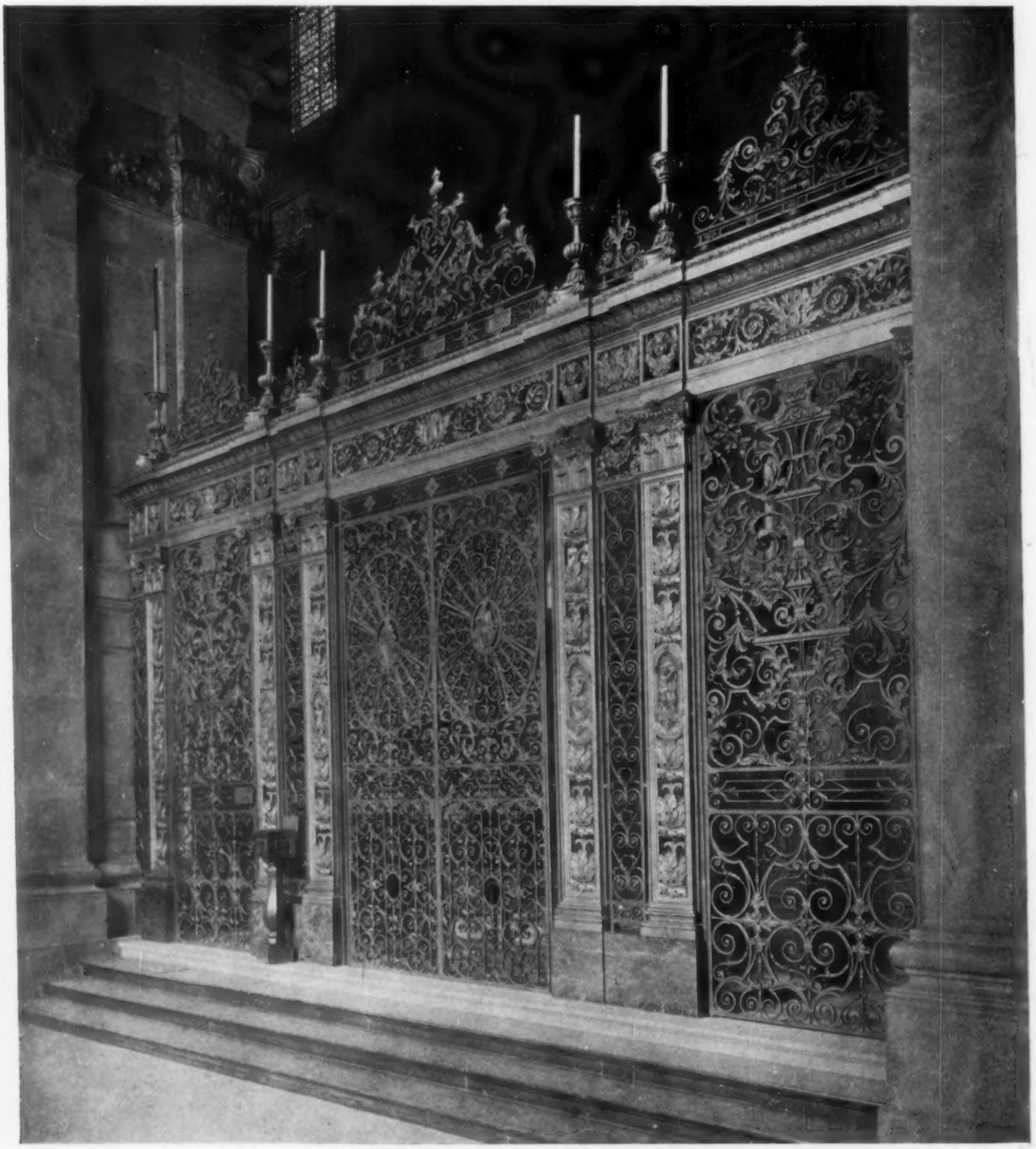
Ironwork at Foot of Staircase in Southwest Tower

Bay of Choir Rail

Details of Ironwork Wrought by Jean Tijou, St. Paul's Cathedral, London

received and the speed and great care with which they were executed, would indicate that he had surrounded himself with other capable craftsmen.

In studying his work in comparison with what had been done in England before his time, and with the ironwork of those who followed him, we see at once that an entirely new departure was effected by Tijou. He brought with him a French influence that wholly changed the character of English smithcraft. Before his time the possibilities of rich leafage, of embossed masks and panels, had not been realized. It was Tijou who set the model and created a new school of English ironwork, and so high was the standard of his execution that it was never excelled either by contemporary or later craftsmen. It is the perfection of craftsmanship, for it preserves the freedom of the smith with the studied art of the designer, and as such is a unique heritage.



Wrought Iron Screen in South Choir Aisle, St. Paul's Cathedral

See Frontispiece for Detail of Center Gates

The Need for Industrial Housing

THIS GREAT PROBLEM NOW BEFORE THE ATTENTION OF THE NATIONAL GOVERNMENT REQUIRES THE SERVICES OF ARCHITECTS FOR ITS PROPER DEVELOPMENT

IN the past few weeks the necessity of housing the industrial workers, who are required in great numbers to keep production up to the scale of the country's war needs, has gradually been recognized as one of the vital problems of the day. In its proper solution is held the promise of speeding up the shipbuilding program — one of the immediate results the Government must accomplish.

The necessity of providing houses for the workers, where they may enjoy normal family life and such sanitary conveniences and opportunities for recreation after their hours of labor as will ensure decent, healthful living, has not been overlooked by all manufacturers, and could not well be, for it has been apparent to any one conversant with conditions that the great "overturn" of labor, with its attendant tremendous cost, was the direct result of assembling men at newly created plants devoid of any housing facilities, and in many cases even adequate transportation to bring them to and from centers where they could be accommodated. Much as they realized the situation and perceived the remedy, the manufacturers themselves were powerless to supply the deficiencies. Such tremendous demands for war materials were placed by the Government upon them that all of their capital resources were required for the expansion of their plants, purchase of raw materials, and equipment. To illustrate the extent to which manufacturers must provide working capital, it may be stated that one large corporation has contracts covering $300,000,000, contrasted with its normal commercial business of $40,000,000, and another's contracts total $150,000,000, compared with a normal business of $10,000,000. It is evident from conditions such as these that local capital cannot assume the responsibility of supplying the housing shortage. Many concerns at the beginning of the industrial expansion attempted to supply their own needs, but their plans had to be abandoned because they could not secure the necessary credit beyond that for working capital.

The solution of the difficulty must therefore be looked for through Government aid, as it has already been accomplished in England, where the identical problems we are now facing have been solved to an appreciably large extent.

The importance of immediate action to relieve present chaotic conditions was brought forcefully to the attention of the Government by Homer L. Ferguson, President of the Newport News Ship building Company, testifying at the recent investigation of shipbuilding progress conducted by the Senate Commerce Committee. He said in part: "The housing problem is one of the most vital factors facing the Government in the conduct of the war. You cannot get the ships unless houses are provided for workmen. We want to add 5,000 men to our force, and there is no where in Newport News for them to live. I understand that conditions elsewhere are equally as bad."

This statement was made on January 8th and since then considerable action has taken place that indicates the Government recognizes the need of its help and is making plans to furnish substantial assistance. The events of the last few days may be briefly reviewed to show what steps are being taken.

Shortly previous to the present activity, Secretary of War Baker, acting as Chairman of the Council of National Defense, appointed a committee of five to study the needs of housing war workers. This followed a hearing conducted by the Advisory Commission of the Council of National Defense instigated by the results of an investigation begun last June by Samuel Gompers, Chairman of the Committee on Labor, through one of the subdivisions of his Committee on Welfare Work, which, however, have not been made public.

The committee appointed by Mr. Baker was composed of the following members: Otto M. Eidlitz, New York builder, Chairman; Gertrude Beeks Easley, Director of Welfare Department, National Civic Federation; Theodore W. Robinson, Vice-President of Illinois Steel Company; Wm. J. Spencer, Building Trades Department, American Federation of Labor, and Charles G. DuBois, of the American Telephone and Telegraph Company. It may be remarked in passing that the great body of American architects, many of whom have contributed largely to our knowledge of town planning and housing, might have been represented on this committee by at least one member of their profession to the benefit of the committee's survey of a difficult problem; but the sense of well ordered building, directed, as it can only be, under the hand of a competent architect, is not one of the attributes possessed by the powers at Washington.

This committee completed its work, and after the receipt of its report Mr. Eidlitz was appointed a committee of one to confer with the three departments concerned — the Army, Navy, and Shipping Board — with a view to obtaining early action. In its report to the Council of National Defense the committee included certain recommendations comprising, in part, the creation of an administrative agency to

direct the housing problem for the Government, which it is hoped will be allowed an appropriation by Congress of not less than $100,000,000 to be loaned for a period of years at a low rate of interest to contractors who are building ships and making munitions for the Government.

It recommends that the problem be considered only as a war measure and that Government aid be rigidly confined to such industries and communities as can clearly prove that their output of essential war supplies would otherwise be restricted.

It further states as its belief that considerable congestion can be avoided in the future if the organized agencies of the Government making contracts give due consideration to labor supply and housing facilities prior to closing contracts, so that undue concentration of workers may be prevented in any one locality.

Particular advantages claimed for this means of handling the problem are that it would place the responsibility for the expenditure of the money on the corporations, would tend to interest local capital, and would excuse the Government from determining the needs in particular instances, since the liability placed on the individual corporations that received the loans would be expected to prevent automatically any reckless or extravagant building.

From the fact that President Wilson conferred with the committee on the day previous to the publication of the report, it may be considered to express, more or less, the views of the Administration and indicate the probable line of action the Government will pursue.

The suggested solution of this emergency problem entails many departures from traditional American Government functions, and because of precedents such action may establish, the subject has a broad interest for architects, who by nature of their profession have largely directed private enterprise in housing from the establishment of the country. With the intimate knowledge they have of housing conditions, architects realize that housing shortage is no new problem — it is a condition of long standing, and has only now been brought to the attention of the public in such a manner that it can be measured in terms the entire people can understand, because of the present extremely aggravated state. Knowing these conditions, architects cannot but see in the above outlined program a strong tendency toward considering the problem in a temporary light and meeting it with the minimum of expense and responsibility, instead of adopting the broad constructive policy that should characterize any undertaking of the Government. In the light of the tremendous strides taken by the British Government, which strike at the root of the matter, the proposed relief in our own country seems entirely lacking in constructive vision and adequacy.

Aside from the narrowness of the suggested policy, certain outstanding and fundamental handicaps are immediately imposed on the execution of work carried out on its basis. It will make long delays and bargaining necessary on the part of corporations to secure the needed land, and also incur delay in establishing terms between the Government and the corporations as to the security of loans and their payment. With the power of spending the money in the hands of individual corporations, no unified scheme will be followed, and it is safe to say that in almost every case only the immediate need will be considered. The corporations will assume as little responsibility as possible, and the absolute minimum of conveniences will be provided — while it is earnestly hoped in permanent, safe construction wooden barracks, following the precedent of the National Army Cantonments, may possibly be the answer.

Furthermore, the division of this great work into isolated units, controlled by unaffiliated corporations, will set up more competition for labor and materials than we are contending with at present, due to the inevitable priority rights that all will demand.

The great danger to our industrial progress that lurks in handling a big undertaking in this way is clearly pointed out by past events — months will be spent making separate arrangements with many different corporations, competition between corporations will limit effective action, and the condition which should have been apparent at the start, at least in the case of new shipyards located in open stretches of waste land along the seaboard with absolutely no housing facilities, will continue till our active participation in the war will be forced still further into the future.

Architects have been eager to place at the disposal of the Government their expert knowledge with reference to building activities, and in this present problem where they can be of great practical use it is hoped the Government will recognize their qualifications. The New York Chapter of the American Institute of Architects has forwarded to President Wilson and members of the War Council a list of recommendations embodied in a resolution recently passed by the Chapter, urging that the Government take upon itself the responsibility of providing the necessary housing facilities. Its recommendations take the form of the following specific suggestions:

The First Step

Create a central authority with:

(*a*) Power to take land for this purpose.

(*b*) Powers to survey needs for housing facilities and to determine, in co-operation with a central priority board, the relative importance of industrial operations.

(*c*) Powers to design and construct communities where the needs of such have been made evident by the survey.

(*d*) Powers to operate and manage these communities during the war and for a period of years thereafter.

(*e*) Powers to maintain a high standard of physical well-being in munition plants (adopting the standards set by our most progressive industrial corporations), and to organize community activities within the communities thus created.

THE SECOND STEP

Create a commission to study the final disposition of these properties. Such a commission to consider and report upon:

(*a*) The basis upon which such communities could be transferred to municipalities or local limited dividend corporations.

(*b*) The organization of local limited dividend corporations to manage and develop the communities created during the war.

(*c*) The establishment of that part of the cost which should be written off as belonging to the cost of war.

(*d*) The methods of saving of the appreciation of land values for the benefit of the community as a whole.

Frederick L. Ackerman, a member of the institute who has recently returned from England, where he investigated the methods adopted for housing the war workers, in discussing the recommendations stated that the methods proposed for Government aid in America are the very ones which were tried and discarded as a failure in England early in the war. He points to England's present success in handling the problem to prove that her method of assuming the entire responsibility through a Government housing agency is the only certain method of getting immediate and permanent relief, as well as providing a flexible policy that may be quickly adapted to changing conditions. In the British system the Government is empowered to acquire land, build houses of a permanent nature that will be useful after the war and rent them to the workers, leaving the final disposition of the property and the amount the Government will charge off as a part of the war cost, to be determined after the war when a careful study of the entire problem can be made.

As we go to press the activities already started at Washington do not indicate a policy even slightly resembling the broad thoughts embodied in the New York Chapter's resolution. The Shipping Board has been convinced that it is absolutely necessary to relieve conditions at the shipyards, and a few loans have been made to some of the shipbuilding corporations for erecting barracks and other temporary structures. The money for carrying on this work is provided the corporations that control its expenditure from the emergency funds of the general appropriations for shipbuilding, and is naturally limited.

In addition to this relief, which is small in scope and intended to meet only the most immediate need, a bill authorizing the expenditure of $50,000,000 for the construction of houses near shipyards has just passed the Senate. This bill places the housing matter in the hands of the Emergency Fleet Corporation, and clearly shows the inadequate way in which the Government is attacking the problem. It would seem after forcibly having had the tremendous handicap housing shortage imposes on production brought to the foreground in the shipping inquiry that it would require no exceptional foresight to see that the same conditions will prevail in other industries and in sections of the country other than the Atlantic seaboard. Munitions, airplanes, powder and ordnance plants — all these must be developed and filled with workers who will need many times the housing facilities near them to-day, if indeed in some instances there are any accommodations whatever. The present situation is only the logical outcome of the neglect on the part of Government authorities and manufacturers to contribute in any definite way to the housing of workingmen for many years past. In a great national emergency, when a problem of such vital importance demands the recognition it should have long been accorded, our authorities in Washington make a few scratches on the surface, recognize one small division of the subject, and throw its development and execution on a department of the Government already fully occupied by its own mammoth duty — the building of ships.

The housing of the workers that will be needed to make the supplies for our fighting forces will be one of the biggest problems of the war, and the earlier it is recognized and plans made for its solution, just so much earlier may we expect to see peace. The housing problem, furthermore, will not be solved by merely providing a place for a worker to sleep. It must be so handled that living conditions will be sufficiently good to hold a force of workers in contentment in the face of a great demand for labor at high wages.

There is only one method that will ensure satisfactory results from both standpoints of speeding up the industries and securing good housing that will meet both present and future needs. Briefly stated, it is the creation of a central authority in the form of a Housing Administration of the Federal Government, headed by a competent architect of broad training and ability who can secure for the Government through the co-ordinated action of architects, engineers, and contractors housing accommodations of such practicability and good quality as can only be produced by the best talent the country possesses.

From Washington

THE national melting-pot has reached the boiling point in Washington and is being very vigorously stirred by our Congressmen and Senators who have returned to the fray.

The architectural profession, with few exceptions, unfortunately is not in the position it should be to help our country to the best advantage in this great crisis, and in a number of instances it is very evident that it could replace others, much to the advantage of the government. One of the most important problems to be considered in doing the best to win in the least amount of time, is the placing of the right talent in the right place. This unfortunately has not been done among the architects to the extent it should be, and it is believed that our great profession has to a certain extent been overlooked, because the public has unfortunately acquired the impression that an architect is not a practical man.

In the conception of economical and practical planning undoubtedly the architect does shine above all other technical experts. His profession is one where imagination and judgment receive the greatest chance for development, yet none of the cantonments except in an indirect way has been done by architects, and very few of the other large government temporary structures used for war purposes. This is undoubtedly all due to the fact that the public does not realize the necessity of plans being prepared by expert planners. The fact that the architect has not been employed as an architect with proper powers, was probably also due to the jealousies of bureau heads, who are most desirous of holding as much power in their own hands as possible. This has been the great problem that has confronted our profession in Washington in the past. Every dark cloud has its silver lining, however, and we hope this cloud of war will have such a lining that will illuminate this condition in the eyes of the powers that be, so that a change for the better may be had.

The great demand for clerical forces in Washington, brought about by war conditions, is naturally straining the office space of the quiet little southern city that Washington was before last April. No one could have grasped in the beginning what an enormous increase of office and housing space would be required, and it is not yet entirely understood.

It was found when the war began to speed up that it was imperatively necessary to have properly lighted, heated, and ventilated offices immediately, and that the only way to get such space in a hurry was to build them out of non-fireproof materials. The first group of such buildings found necessary after every available space of office room in Washington had been utilized, consisted of quarters for the Defense Board, the Fuel Commission, the Food Commission, and part of the Ordnance Department. These buildings have now been completed and were paid for out of the President's emergency war fund.

A much larger group has been built on the mall from a direct appropriation made by Congress amounting to $2,000,000. The plans were prepared in the office of the Bureau of Public Buildings and grounds under Colonel Ridley of the Engineering Corps of the U. S. A. It is found now that additional space in large quantities will be required, for which Congress has been asked to appropriate $3,500,000.

Aside from these buildings another has just been started for the War Trades Board, which will contain over 250,000 square feet of space from plans prepared by Waddy B. Wood.

The size of these different projects can be grasped when one realizes that temporary office buildings now complete and those contemplated in the near future will cover, in two stories, eighty acres of space. A number of similar projects are being built in the same way throughout the city, such as storehouses, temporary offices for the Navy Department, Quartermaster's Department of the Army, etc., none of which to our knowledge is designed by an architect.

Building regulations in Washington have been waived as to fire laws in connection with this work, and unfortunately these buildings are scattered about the city, in some instances in a rather dangerous way in case of a large conflagration.

It is realized that when all of these buildings are completed the further question that will naturally arise is how this vast army of officers and clerks is going to be housed and fed, and this in turn brings us to the question of housing conditions in Washington — one totally different from the housing problem as applied to employees in war industrial works.

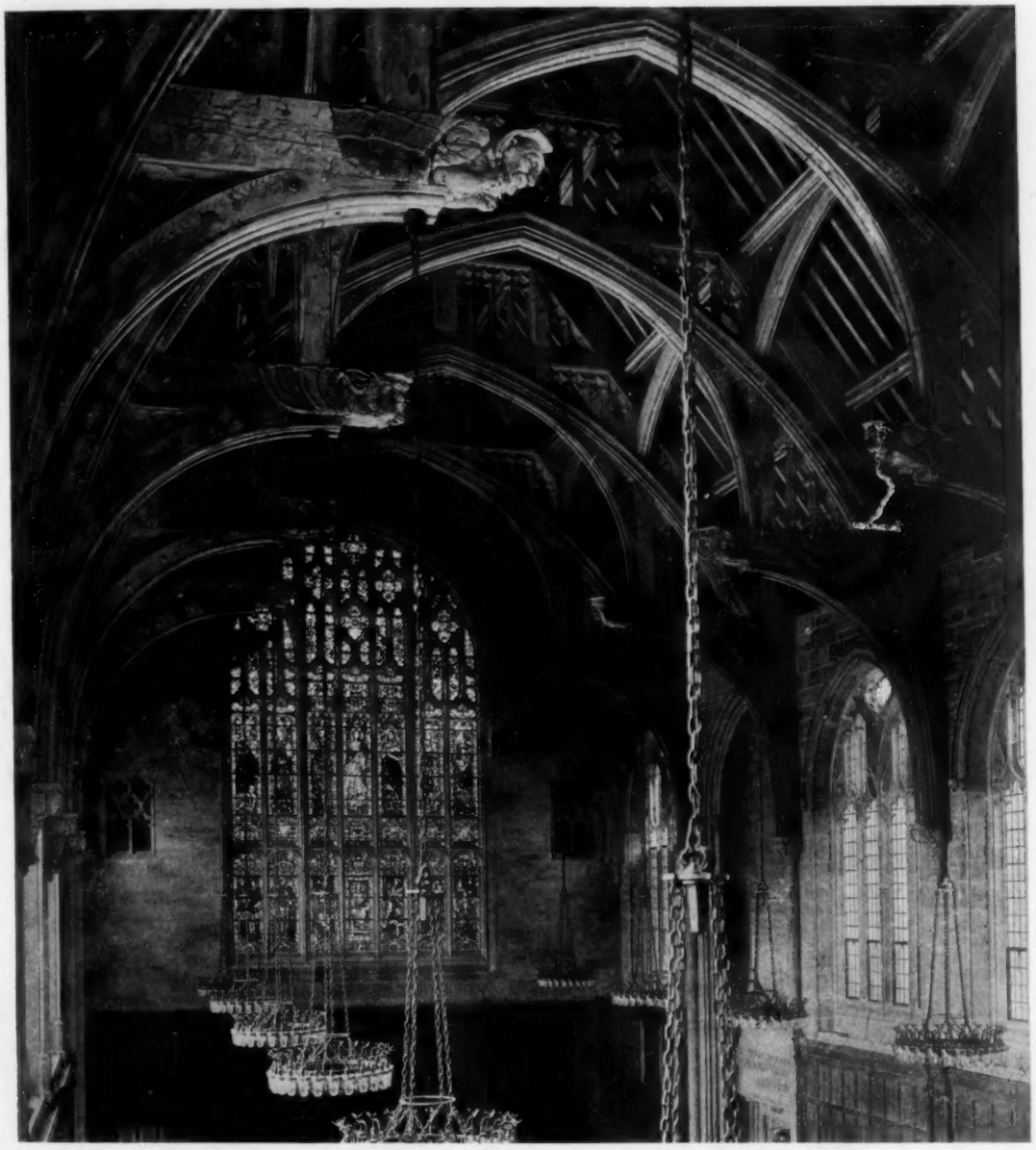
The housing problem in Washington is treated in a report made by Mr. Frederick Law Olmsted, member of the Council of National Defense, and is most excellent in every particular, but not yet released.

It is remarkable how red tape is being done away with, and it is also surprising, when one looks into it, how the government in the past could have accomplished what it has, fettered by this hindrance.

When one reads reports from abroad, he cannot help but realize that even if we have done so well, in order to win we will have to do a great deal better and make much larger sacrifices than have been made. This, there is no doubt, America with its brains and strength will do, and it is hoped that as soon as possible every one will see the absolute necessity of the architect and engineer, the builder and the soldier, all being put where their special training will do the most good. When this has been accomplished, our great machine will run like clockwork, whereas now there is still a great deal of friction which nevertheless is very rapidly disappearing.

THE FORUM COLLECTION OF MODERN GOTHIC ARCHITECTURAL DETAILS

PLATE ONE



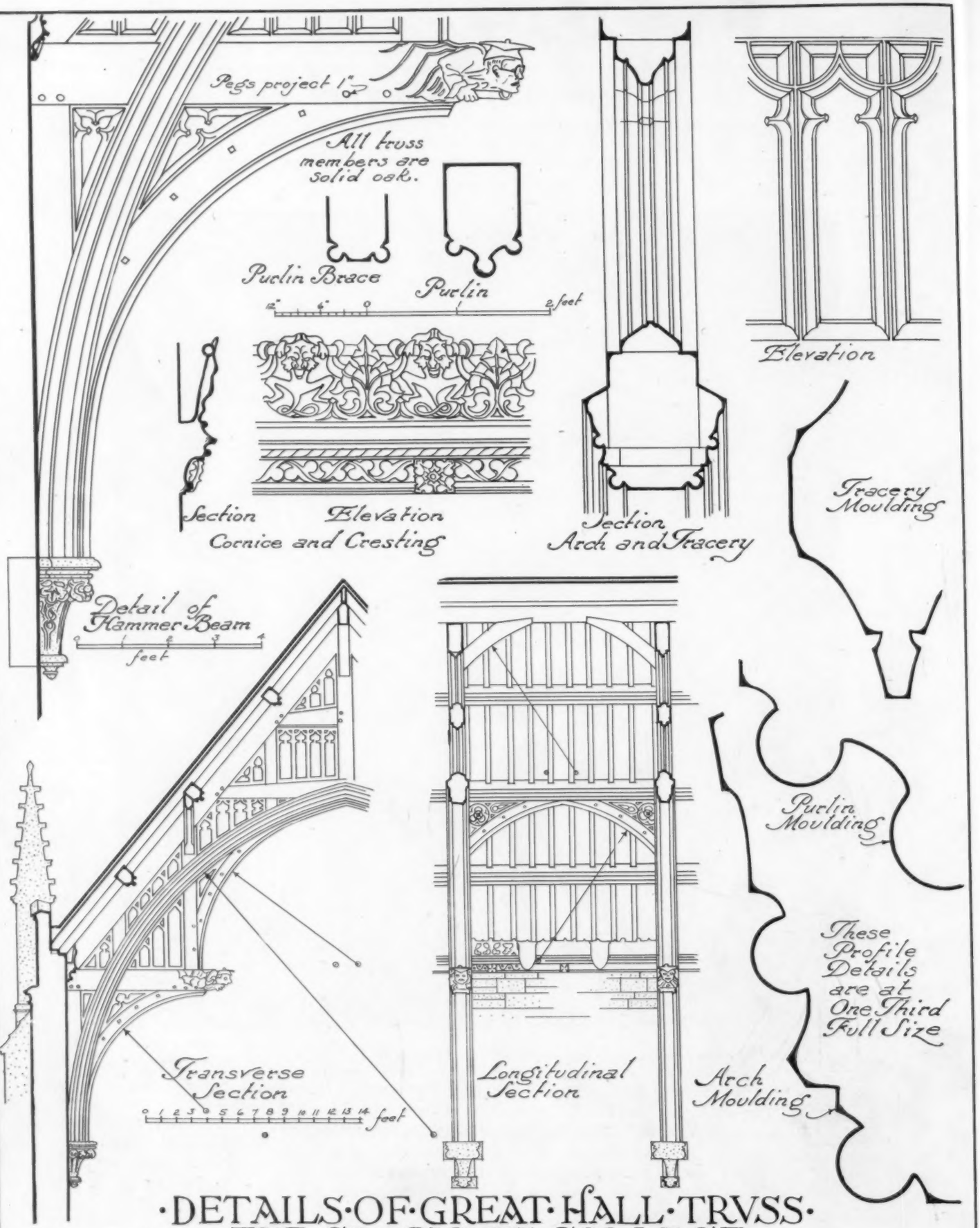
ALL members of the trusses are of solid oak, hand hewn and adzed, but with no applied finish, the wood being left to acquire natural color tones with age.

The top of the ridge is 59 feet above the floor. The hall is composed of eight equal bays, with half trusses at the ends, and has a total length of 106 feet 6 inches.

GREAT HALL TRUSSES, THE GRADUATE COLLEGE, PRINCETON UNIVERSITY

CRAM, GOODHUE & FERGUSON (BOSTON OFFICE), ARCHITECTS

DETAIL DRAWING BY EDGAR T. P. WALKER ON FOLLOWING PAGE



·DETAILS·OF·GREAT·HALL·TRVSS·
·THE·GRADVATE·COLLEGE·
·PRINCETON·VNIVERSITY·

·Cram·Goodhve·&·Fergvson·Architects·
·Boston···Office·

Work dates
1913

Drawing made by
Edgar T. P. Walker.

The Detroit News Building

AN IMPOSING EXAMPLE OF COMMERCIAL ARCHITECTURE AND AN EFFICIENT NEWSPAPER PLANT

ALBERT KAHN, ARCHITECT; ERNEST WILBY, ASSOCIATE

THERE has been an increasing tendency among large American business concerns in late years to erect buildings of distinctive architectural character that are limited to their exclusive use. Banking institutions have undoubtedly been in the lead in this respect, and the success attending their experiments has extended the practice to other commercial corporations. Some of the large daily newspapers recognized the advertising value of such a policy, and among the first to be represented was the *New York Herald*, whose building, erected some years ago from the designs of McKim, Mead & White, established a precedent for many of those erected since.

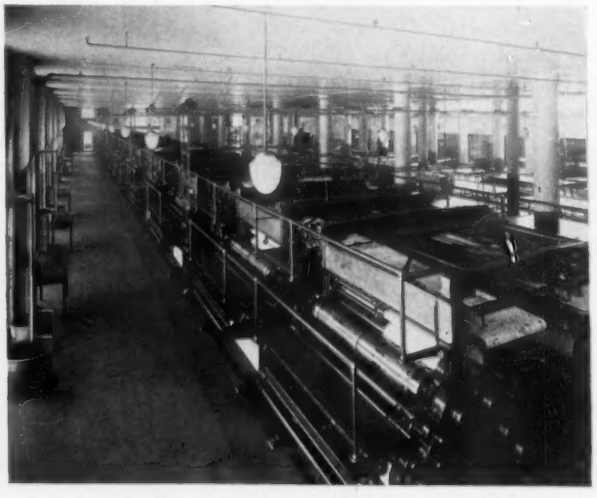
The most recent and in many respects one which presents an ideal solution of the newspaper plant, both from its architectural expression and its perfectly co-ordinated plan, is the building for *The Detroit News* recently completed at Detroit, Mich., from the designs of Albert Kahn and Ernest Wilby. The building occupies a full block on Second avenue, with the principal elevation fronting on Lafayette boulevard. It is unique among the commercial structures of Detroit, aside from certain banking buildings, in having the solid appearance of a masonry building. So general has become the practice of designing commercial buildings with a maximum of glass area and a minimum of wall surface, that a building suggesting masonry construction in its appearance becomes at once distinctive because of its radical departure from surrounding structures.

In its architecture the Detroit News Building is characterized chiefly by an expression of structure. Its frame is of reinforced concrete, and this fact is easily apparent from the series of strongly accentuated piers and spandrels. The piers rise in unbroken lines from the pavement to the top of the parapet, and the strong vertical movement is further intensified by the stone window mullions running through the second and third stories. While at first glance the scheme of the façade may appear to limit the lighting of the interior, in reality no light has been sacrificed, certainly none which affects the use of the interior, and there is, furthermore, an advantage gained in enabling the subdivision of interior space to be more easily accomplished.

The building has no cornice, but instead a broad stone parapet broken by a continuation of the main piers, and at the corners by heavy pylons which are pierced with but a single row of windows and terminated by interesting strong mouldings. The panels of the parapet on the principal façade are decorated with inscriptions of raised letters, which in their vigor are in full sympathy with the façade. Directly above the four piers of the same façade are carved stone figures of the pioneers in printing, — Gutenberg, Plantin, Caxton, and Franklin. In the spandrels between the second and third floor windows are carved various printer's marks of the early periods of the art, and they form the chief and characteristic decoration of the façade, supplemented by the richly carved arch mouldings and ornamented ironwork of the first story windows.

The same broadly handled and simple scheme of decoration has been carried to the interior of the

Composing Room, Showing Double Row of Linotype Machines in Background



Press Room, Showing Battery of 24 Presses in Unbroken Line of 205 Feet

View of Business Offices from Entrance

building. Stone similar to that of the exterior is used for the walls of the entrance lobby and staircase, and a strong factor in the decoration is contributed by the wrought steel vestibule and grilles in the tympani. The decoration of the public portions of the building is in a modified Renaissance manner characterized everywhere by a sense of dignified restraint. The vaulted ceiling of the lobby is painted in various colors and gold following simplified Florentine precedent. An accessory of special interest is the central lighting fixture, an iridescent glass globe leaded and in color to reproduce the medieval maps.

The editorial and business offices are wainscoted in oak and have flat coffered ceilings, which, with the neutral tints of the plastered walls, contribute to a restful simplicity of effect. The private suite of offices on the second floor and president's suite on the mezzanine floor have been decorated in a modified Elizabethan style, with characteristic oak paneling and modeled plaster ceilings.

In developing the plan of the building the needs of a newspaper plant were at all times the influencing factor. The printing of a modern daily newspaper assumes the character of a manufacturing proposition, and in the equipment and planning of the building the principles of arrangement which have been proven to underlie successful manufacture were applied. The essence of newspaper publishing is the efficient use of time, much of the necessary work being done in periods that are counted as minutes — not hours — and it is therefore evident that a logical and efficient scheme of quickly handling the various operations was the controlling factor in the arrangement of the various floors.

The composing room and engraving room, each requiring abundant daylight, are arranged on the top floor where they are enabled to receive great quantities of light through the large window openings of the court; and in the composing room where eye strain is both continuous and severe, roof lighting in addition is obtained through a structural steel monitor, which is the one departure from concrete construction.

The Detroit News Building, aside from being a success as the home of a large manufacturing enterprise, is also of significant value in being the source of keen satisfaction to the employees of the newspaper, and the inspiration of countless people who pass it by in the course of their daily life.

News Room with Staff Partially Assembled

EDITORIAL COMMENT

WHAT is the trouble with architecture as a profession in these troublous times? Up to last April architects were a hard-working and generally respected set of citizens, who voted conservatively, paid their taxes with a good grace, gave rather more liberally of their time for schemes of improvement than did the average citizen, and complacently regarded themselves as useful members of society and worthy of at least reasonable consideration in any time of emergency. But how these innocent ideas have gone glimmering in the past nine months! Although scores of architects of the highest standing offered their office organizations and personal services complete to the Government in the early stages of the war when the great National Army cantonments were being projected, not one offer was accepted, and the construction of these buildings was entrusted to hastily gathered organizations of engineers and landscape architects, working under or with the general direction of the Quartermaster Generals' office, itself a force crude in ideas and hastily expanded to many times its normal size. It has not yet been shown what the country gained by thus summarily dispensing with the services of architects of long experience, and assuming offhand that their training and habits of thought would be useless in such an emergency.

Following this humiliating snub the profession was given another jolt by the President's amazing request that all construction work be abandoned until the close of the war. This request, which as a matter of fact amounted to an order, put architects and contractors in the same class with brewers and saloonkeepers, whose business was undesirable and whose maintenance was unnecessary, and implied that as far as serving the country was concerned, while the younger men might assist as bomb-throwers or at best as members of the camouflage corps, those beyond military age had better be knocked on the head after their capacity for paying "excess profit" taxes and buying Liberty Bonds had been exhausted. The Government apparently has not stopped to consider that in Germany work on many great public construction operations such as the Berlin Subway, for example, has been going on constantly during the war, and even in long-suffering France such a costly operation as the Marseilles Ship Canal has not suffered a moment's delay during the war period. The present pessimism of the Government, which seems to amount almost to a panic, has probably resulted in a worse dislocation of business in the United States than has occurred even in some of the invaded countries.

These remarks are not made in criticism of the Government, but are statements of fact as they must be interpreted by architects. It is realized by every member of the profession that the country was called upon to meet an emergency for which it was not fully prepared, and in the stress of hastily assembling organizations to direct huge undertakings, it was inevitable that offers of valuable service would be overlooked. But what still remains difficult to comprehend is why after there has been ample opportunity to judge relative values, the same conditions should be allowed to exist.

What can architects do to save what remains of their business and perhaps build up their professional influence to its former position? Many important Government projects remain to be carried out, although the land is covered with the engineering abortions of the summer's haste and waste policy from which only the contractors profited. Great operations are proposed for housing the workers at the shipyards and munition plants. The projectors of these enormous plants, not stopping to investigate the experience of England, seemed to suppose that workmen would be content to live for months or years in bunk houses away from their families and far from diversion of any sort. Only now is it beginning to dawn upon them — thanks to the unremitting labors of some members of the Council of National Defense — that even to ensure their health, decent sanitary conditions of space and drainage are essential; while to avoid the fearfully costly weekly "overturn" of employees, amounting in some cases to 50 per cent of the entire force engaged, comfortable homes, suitable for family life or decent boarding places, must be built as a part of the general plan, and with them must go schools, churches, and cinemas, as well as playgrounds and recreation centers. There is no escape from this final conclusion, no matter how many costly blunders are made at the outset.

Here, then, is a field for the architect, and one indisputably his own. Architects by experience and training are accustomed to good permanent construction, and none other should be considered by the Government for an instant, for the Government must be made to learn that any other construction is simply building future slums for the working class.

Architects are used to completing buildings within a given, and usually inadequate, appropriation. This is part of their daily life, for the extravagant "cost plus" and "unit" systems of engineers have no place in their schedule. Up to the present, economy has formed no part of the Government's program, but there are signs of dawning sanity in this direction. The cities that are to rise around the great shipyards and factories must be "Garden Cities," in the best sense, which means that they must not only be healthful, attractive, and comfortable, but

they must be good, permanent investments which will continue to be useful and paying propositions after the war when the purely military construction has gone to the scrap heap. Properly planned and built, these cities will be so attractive for workers that new industries will actually flock to them, and the Government's investment will be practically as well as sentimentally sound.

Unless architects heed the knock of opportunity the chance for utilizing their talents will be lost and instead of leading the march of civilization with a splendid showing of modern industrial cities, America will, as she has too often done before, build instead as habitations for her industrial army, which is no less important than her military forces, an array of disease-breeding slums—a prey after the war to conflagration or worse.

RED CROSS REQUESTS OLD TRACINGS

THE Red Cross is making an appeal to all architects and engineers for discarded tracing cloth. It has been found that this material, when properly washed, makes excellent surgical dressings for use in hospitals for our wounded soldiers and sailors. Arrangements have been made by the Red Cross with public laundries for laundering the cloth, and architects and engineers who have tracings of no further use are asked to communicate with the local Laundryowners' Association or any of the large laundries which will be found ready to send for such cloth as may be donated. This is a small service, but of the greatest value and importance in its total effect.

BOOK NOTE

HANDBOOK FOR ARCHITECTS AND BUILDERS. Emery Stanford Hall, Editor. 448 pages. 6¼ by 9¼ inches. Chicago. Illinois Society of Architects. This volume is the twentieth edition of the official publication of the Illinois Society of Architects. It shows evidence of painstaking care in its preparation and embraces an extremely wide range of subjects in its contents. So completely have the conditions governing the practice of architecture in the State of Illinois been covered in past issues that the "Handbook" has become part of the standard equipment of every Illinois architect's office. In the present volume there is a complete index to the Building Ordinances of Chicago which were revised in June, 1917, accompanied by diagrams illustrating obscure or puzzling passages whereby authoritative interpretations are made easily available. Fully one-half of the book is given over to engineering computations and standard specifications of constant value, along with articles on such topics as heating and ventilation, acoustics, paint, and other general subjects which make it of value to others than the architects of the locality from which it enamates.

PLATE DESCRIPTION

HOUSE OF J. RANDOLPH ROBINSON, ESQ., WESTBURY, LONG ISLAND, N. Y. PLATES 6–10. This house is of frame construction with shingle exterior, after the fashion of the New England type. In color it is cream, with green shutters and weathered dark gray shingle roof. The portico feature is somewhat reminiscent of the southern colonial, and recalls in quaintness of detail and execution the country seats of the gentlemen of our colonial period. The terrace on the garden side and the porches are paved with red brick laid in herringbone pattern and level with the grade of the lawn. Simplicity of design and construction is the keynote of the entire house. It is steam heated and is supplied with water from a driven well and storage tank in the adjoining woodland.

HOUSE OF MRS. W. H. FALLON, SPARKILL, N. Y. PLATES 11, 12. The planning of this small house presented a number of requirements which when grouped formed a most interesting problem. First, the lot, an interior one, was but 36 by 80 feet, with a steep pitch across the short dimension. On this was to be placed a house containing six rooms and two baths and a garage for one car. A view toward the Hudson River made it necessary to provide a porch on the long side as well as on the end. The porches seemed to determine most of the plan, as the lot limitations were such that the long porch must be put under the main roof of the house. An adaptation of the colonial houses of northern New Jersey provided for all of these features better than any other style. While the materials used are not true to the type, the architect has preserved the outlines and details of these beautiful old buildings. A point of considerable interest is that the house cost less than $5,000 to build in the early part of 1917. While the rooms are small, none has been reduced to such a degree that comfort or practical use has been sacrificed.

HOUSE OF WILLIAM H. TROTTER, ESQ., CHESTNUT HILL, PHILADELPHIA, PA. PLATES 13–16. The thought that influenced the design of this house was primarily the desire to preserve the natural grades of the property which borders on and slopes to the beautiful and rugged Wissahickon Valley, and to make the house appear as if it fitted and belonged to the ground—a quality so well shown in old English cottages. In order to preserve the natural grades and avoid all artificial fills and terraces, the floor level of the living room was lowered, so that one can step through its exterior door directly upon the natural grade. The walls of the house are of local stone, covered with a light buff stucco, and the roof is covered with split cypress shingles. The principal rooms are finished after the colonial manner, with white painted woodwork of simple character.